

## UNiversity of Mary Washingion

## UNDERGRADUATE ACADEMIC CATALOG 2015-2016



The University ..... 5
Admission and Enrollment ..... 13
Fees and Financial Aid ..... 23
Student Life ..... 33
Academic Resources ..... 39
University Academic Policies and Procedures ..... 53
Courses of Study. ..... 79
College of Arts and Sciences. ..... 81
Bachelor of Arts and Bachelor of Sciences Programs ..... 83
Bachelor of Liberal Studies Program ..... 212
Bachelor of Science in Nursing ..... 224
College of Business ..... 231
Bachelor of Science in Business Administration ..... 233
College of Education ..... 242
Directory ..... 248
Academic Calendar ..... 285
Index ..... 290
The 2014-15 Undergraduate Academic Catalog includes official announcements of academic programs and major academic policies. Although it was prepared on the basis of the best information available at the time of publication, students are encouraged to seek the most current information from the appropriate offices. All students are responsible for knowing the policies of the University.
For educational and financial reasons, the University reserves the right to change, at any time, any of the provisions, statements, policies, curricula, procedures, fees, or dates found in this Catalog. Statements in the Catalog do not constitute an actual or implied contract between the student and the University. This Catalog is also available online, and the definitive version of the Catalog shall be the electronic HTML version published on the University website.
The University of Mary Washington is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate and masters degrees. Contact the Commission on Colleges at 1886 Southern Lane, Decatur, Georgia, 30033-4097 or call 404/6794500 for questions about the accreditation of the University of Mary Washington.


## THE UNIVERSITY

Chartered on March 14, 1908, and originally established as a State Normal and Industrial School for Women, the institution has evolved into a state-assisted, coeducational university consisting of campuses in Fredericksburg, Virginia; Stafford County; and King George County. The University of Mary Washington is recognized as one of the nation's best small universities by such authoritative publications as U.S. News and World Report, Barron's Profiles of American Colleges, The Fiske Guide to Colleges, and The Princeton Review. In addition, programs in business, education, and adult degree completion provide a rich diversity of options that build upon and extend the University of Mary Washington's excellence in the liberal arts.

Several factors contribute to the institution's excellence. Foremost among these are the expertise and commitment of the faculty. Members of the faculty are energetically engaged in productive research and scholarship, which lead to the advancement of their particular disciplines. At the same time, however, it is teaching that is their primary goal and purpose.

Teaching effectiveness is enhanced by the small size of most classes, which encourages personal interaction between faculty and students. Moreover, faculty devote much attention to students' concerns beyond the classroom, working closely with them on matters of academic, career, and personal development. Every institution of higher learning accredited by the Southern Association of Colleges and Schools possesses a brief, formal statement of institutional purpose. This statement defines the mission and role of the institution. It also provides a clear sense of overarching direction and a benchmark against which institutional effectiveness may be gauged. The official mission statement of the University, adopted by its governing Rector and Board of Visitors and approved by the State Council of Higher Education for Virginia, is as follows:

## UNIVERSITY OF MARY WASHINGTON MISSION STATEMENT

The University of Mary Washington is one of Virginia's outstanding public liberal arts universities, providing a superior education that inspires and enables our students to make positive changes in the world.

The University is a place where faculty, students, and staff share in the creation and exploration of knowledge through freedom of inquiry,
personal responsibility, and service. UMW regards the provision of highquality instruction as its most important function. The University offers a wide range of undergraduate and graduate programs focusing on both disciplinary and interdisciplinary studies. These academic programs afford students opportunities to integrate and apply their knowledge within broad educational experiences, to develop their professional interests, and to practice the habits of mind necessary for life-long learning. Through a professionally engaged faculty, the University supports ongoing research appropriate to the development of student abilities and faculty interests. It especially encourages the participation of undergraduates in research.

UMW's size, dedicated faculty, and historical commitment to fine teaching create an institutional culture where both undergraduate and graduate students benefit from strong connections with their faculty and multiple opportunities for active learning.

Located in Fredericksburg between our nation's capital and the capital of the Commonwealth of Virginia, the University of Mary Washington is a nexus for engagement among diverse communities and is dedicated to supporting professional advancement and economic development and to improving the regional quality of life.

We fulfill our mission by immersing students, faculty, and staff in local, regional, national, and international communities, and by inculcating the values of honor and integrity. UMW graduates are models of adaptive learning, personal achievement, responsible leadership, service to others, and engaged citizenship in a global and diverse society.

## HISTORY AND DEVELOPMENT OF THE UNIVERSITY

The institution was founded in 1908 as the State Normal and Industrial School for Women in Fredericksburg. The name was changed in 1924 to the State Teachers College at Fredericksburg, and again in 1938 to Mary Washington College, having transformed over the years to Virginia's public liberal arts college for women. Then in 1944, Mary Washington College became affiliated with the University of Virginia as its women's undergraduate arts and sciences division. In 1970 the entire University became coeducational and in 1972, by action of the General Assembly of Virginia, the College became an independent, state-supported institution for women and men, with its own governing board. On July 1, 2004, the General Assembly named the institution University of Mary Washington.

Through an emphasis on quality, the University attracts students from all areas of Virginia, particularly the urban areas of Northern Virginia, Richmond, and Tidewater. Approximately 25 percent of its on-campus resident students are from other states and foreign countries, with the largest population coming from Southern, Middle Atlantic, and New England states. Located in the middle of a rapidly growing Washington-Richmond "urban
corridor," the University of Mary Washington serves the educational needs of both full-time and part-time students.

To meet the diverse academic goals sought by students in today's society, the undergraduate curriculum is organized into three colleges - the College of Arts and Sciences, the College of Business, and the College of Education. The various academic departments and disciplines offer more than 30 undergraduate programs. Four undergraduate degrees are awarded: Bachelor of Arts, Bachelor of Science, Bachelor of Liberal Studies, and Bachelor of Professional Studies. Emphasis upon excellence in the pursuit of liberal learning has traditionally been at the core of the University's educational philosophy, and commitment to this tradition will continue.

The University of Mary Washington also awards graduate degrees: Master of Business Administration (MBA), Master of Science in Geospatial Analysis, Master of Education, and Master of Science in Elementary Education. Details about these degree programs are available in the University's Graduate Academic Catalog. Because the Master of Science in Elementary Education is a fifth-year program that follows directly from the undergraduate degree, details about it are available in the education section of this Catalog as well.

As the University evaluates its offerings, it will build upon its high-quality programs and propose curricular additions and adjustments specifically designed to meet new and increased demands.

## STATEMENT OF COMMUNITY VALUES

The University of Mary Washington is an academic community dedicated to the highest standards of scholarship, personal integrity, responsible conduct, and respect for the individual. We hold among our foremost common values:

- the importance of personal integrity as reflected in adherence to the Honor Code
- the right of every individual to be treated with dignity and respect at all times
- the appreciation of and respect for diversity in our community and adherence to the University's Principles of Diversity and Inclusion and the University's Statement of Non-Discrimination, and
- the freedom of intellectual inquiry in the pursuit of truth.

We accept responsibility to help create the environment we strive to achieve. We will live up to these values and work to support our collective and individual successes. As members of the University community we will not condone behavior that compromises or threatens these values.

## UMW PRINCIPLES ON DIVERSITY AND INCLUSION

The University of Mary Washington strives to create a climate of acceptance and will promote the values of diversity and inclusiveness. These values strengthen our community and are essential to our academic mission and institutional excellence.

The University of Mary Washington values diversity in all forms-including diversity of age, culture, disability, economic background, ethnicity, gender, gender identity and expression, marital status, national origin, opinion, political affiliation, race, religious background, sexual orientation and veteran status.

The University of Mary Washington recognizes its responsibility to be a model of fairness and equal opportunity, providing intellectual and institutional leadership regarding diversity issues and initiatives.

As a public university in the Commonwealth of Virginia, the University of Mary Washington embraces its obligation to provide educational opportunities to broader communities found locally and nationally, and to then reflect the diversity of peoples, backgrounds, and experiences in the student body, faculty, administration and staff.

The University is committed to providing broad administrative, programmatic and academic support to achieve its institutional goals for diversity.

The University seeks to prepare students from all backgrounds and identities to live, work and thrive in a global society.

The University seeks to provide a welcoming and inclusive environment of mutual respect for students, faculty, staff and community, internally and externally, of all backgrounds and identities.

The University of Mary Washington recognizes that the adoption of this Statement is the responsibility of the entire University community. To ensure the successful implementation of the statement, the University is committed to a system of responsibility, accountability, and recognition for all faculty, staff, and students that carries out the institutional values on diversity and inclusion and all related goals and objectives.

## THE HONOR SYSTEM

Another element basic to the University's mission is adherence to the Honor System, which applies to every student enrolled at the University and constitutes one of the distinctive features of student life at the institution. This system, based upon the integrity of each student, provides that a student shall act honorably in all facets of campus life. The Honor Pledge required on quizzes, examinations, and other course work means that the work that the student submits is the student's own, completed according to requirements for the course as determined by the instructor. Lying, cheating, and stealing are specific infringements of the Honor Code. In the case of an alleged violation, an Honor hearing is conducted by an elected Honor Council. When a student is found "responsible," the student may receive a sanction ranging from honor education to permanent dismissal from the University, and major sanctions will be noted on the student's permanent academic transcript. All students and faculty should understand that by joining the University of Mary Washington community they commit themselves to living by and upholding the Honor System.

## THE CAMPUSES

The learning environment of the University of Mary Washington is further enhanced by the very location and physical characteristics of each campus. The University is named for the mother of George Washington, who lived most of her life in Fredericksburg and is buried near the Fredericksburg campus. Fredericksburg is a place of extraordinary historical significance in both the Revolutionary and Civil War eras. Indeed, the original campus is located on Marye's Heights, a Confederate artillery position in the 1862 Battle of Fredericksburg, and major historic sites abound throughout the area.

The spacious Fredericksburg campus, located in an established residential neighborhood, is exceptionally attractive. Both academic and residential buildings, consistent in their neoclassical, Jeffersonian style of architecture, are interspersed along a wide brick Campus Walk that extends for more than a half-mile from one end of campus to the other. With vehicular traffic and parking confined to the edges of campus, the grounds offer extensive park-like space including substantial stretches of lawn and large wooded areas.

The Stafford campus, located seven miles north of the Fredericksburg campus, is situated on a wooded 48 -acre site in the heart of one of the region's rapidly developing business, technology, and residential corridors. The campus location, parking, and modern architectural design have been carefully tailored to maximize convenience and educational quality for working adult commuting students, while remaining faithful to the high aesthetic standards of the University.

A third campus in King George County, near the Dahlgren Naval Surface Warfare Station, opened in January 2012. The UMW Dahlgren Campus

Center for Education and Research is designed to support the education and continued professional development of the region's engineers, scientists and professionals by providing educational programs and services to the Naval base and the surrounding community.

Two historic sites are also owned and administered by the University of Mary Washington: Belmont, the home of famed impressionist artist Gari Melchers, and the James Monroe Museum and Memorial Library, located on the site of James Monroe's Fredericksburg law office. Overlooking the Rappahannock River, Belmont is a carefully restored 18th-century house and early 20th-century artist's studio, which now serves as a gallery of Melchers' work. The James Monroe Museum illustrates and educates about the life and times of America's fifth president and houses artifacts, an archive, and a presidential library. Working in conjunction with the University's Department of Historic Preservation, the Museum promotes education in museum practice, research, public history, and collections management.

## CENTER FOR ECONOMIC DEVELOPMENT

The Center for Economic Development serves to assist area jurisdictions in their efforts to promote economic development of the region. The Center also functions as a central point of contact to connect UMW faculty and students with regional initiatives and businesses seeking their assistance, such as through the University's partnership with the Fredericksburg Regional Alliance. A number of separate units report to the Center for Economic Development. The Dahlgren Campus/Center for Education and Research supports the education and continued professional development of the region's engineers, scientists, and professionals who provide services to the Naval base and the surrounding community. This campus is currently utilized by George Mason University, Germanna Community College, Naval Postgraduate School, Naval War College, Old Dominion University, Rappahannock Community College, Virginia Commonwealth University, and Virginia Tech. The Professional Development programs at UMW provide the region's business and professional community with high quality programs designed to enhance individual performance and organizational effectiveness, primarily through certification programs in human resource management and project management. The Small Business Development Center (SBDC) helps entrepreneurs and small businesses establish, manage, and expand their organizations. The SBDC provides expert, one-on-one, confidential counseling, and research services at no cost, and it offers seminars and training programs in all aspects of small business management at low costs. These services are available to any existing or startup small business or potential entrepreneur.

## THE UNIVERSITY OF MARY WASHINGTON DIFFERENCE

Whatever degree program students may choose - and whether they reside on campus or commute - the aim of the University of Mary Washington is not merely to ensure that its students are well-trained in a discipline and wellprepared for productive employment. The basic goal of the University is much broader and ultimately more important: to ensure the development of those skills of writing, speaking, and critical thinking that make possible a lifetime of creativity and intellectual development.

In short, the University of Mary Washington - through its rich history, educational philosophy, and exceptional environment for learning - offers today's students a superior opportunity for obtaining a broad, liberal education based upon honesty, freedom of inquiry, personal responsibility, and intellectual integrity that will provide the foundation for meeting the challenges and attaining the potentialities of the 21st century.

## STATEMENT OF NON-DISCRIMINATION

The University of Mary Washington subscribes to the principles of equal opportunity and affirmative action. The University does not discriminate on the basis of race, color, religion, disability, national origin, political affiliation, marital status, sexual orientation, sex, or age in recruiting, admitting, and enrolling students or in hiring and promoting faculty and staff members. The University will not recognize or condone student, faculty, or staff organizations that discriminate in selecting members. Complaints of discrimination or questions should be directed to the AAEEO Officer of the University.


## ADMISSION AND ENROLLMENT

## ENROLLMENT OPTIONS

The University of Mary Washington offers a number of different enrollment options. Each is designed to meet the needs of a particular student population. All of the University's degree programs may be pursued on either a full-time or part-time basis.
The University's College of Arts and Sciences offers undergraduate degree programs and course work in the liberal arts and sciences. Most students pursue the traditional Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree programs. A first time, first year B.A./B.S. student is eligible to declare a major by submitting the Major/Minor Declaration Form to the chair of the chosen department at the end of their first year or upon the completion of 28 credits. Students are expected to have declared their major at the end of their second year. Students interested in programs offered by the College of Business or the College of Education enroll initially as undeclared students and then later apply for admission to either a Business or Education program. See the specific sections in this Catalog under College of Business or College of Education for further details.

The Bachelor of Liberal Studies (BLS) program offers a flexible degree option specifically designed to meet the needs of adult students who have substantial college experience and want to complete a bachelor's degree in the liberal arts or sciences.

The Bachelor of Science in Nursing completion program (BSN) permits registered nurses to complete a baccalaureate degree in nursing. Students transfer credits from a community college or hospital nursing program and are enrolled in the BSN Completion program upon admission to the university.

Non-degree-seeking students are those who do not necessarily wish to earn a degree from the University of Mary Washington but who enroll in limited course work to satisfy particular needs or for general interest. The nondegree enrollment process is much simpler and less formal than that for degree programs. Individuals may enroll on a space-available basis as non-degree students for the regular session or the summer term.

General enrollment procedures for each program are described in the following sections. Anyone considering applying to the University should consult the most recent publications of the particular program or contact the Office of Admissions for more information.

## ADMISSION TO THE BACHELOR OF ARTS (B.A.) OR BACHELOR OF SCIENCE (B.S.) DEGREE PROGRAMS

Admission to the B.A. or B.S. programs is competitive. Candidates for admission should present evidence of sound academic preparation including solid performance in a challenging academic program. Standardized test scores, extra-curricular activities, essays, and other factors such as recommendations are also considered. The Admissions Committee offers admission to those candidates who present the strongest overall credentials in the particular applicant pool.

To be admitted as a degree-seeking student in the B.A. or B.S. programs, an individual must submit an application, official transcripts from all secondary and post-secondary schools attended, and results of the SAT or ACT. The University of Mary Washington uses the Common Application exclusively. Non-U.S. citizens also must submit the international supplement for admission and, if English is not the primary language, official results of the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). In lieu of the TOEFL, International students may also demonstrate English proficiency by completing Level 112 offered by ELS Educational Services.

## ADMISSION FOLLOWING HIGH SCHOOL

A student who wishes to enter Mary Washington as a freshman immediately after graduating from high school should submit the Common Application including the UMW supplement, along with the non-refundable application fee or an official fee-waiver form approved by a high school official. High school transcripts should be submitted directly to the University from the school. The applicant should also request that results of the SAT, ACT, or any other standardized tests be sent directly to the Office of Admissions at the University of Mary Washington.

High School Preparation. Each applicant must have graduated from an accredited secondary school or the equivalent with credit for at least 16 academic courses emphasizing college preparatory work.

Although the University does not require specific courses for admission, successful applicants usually have completed four years of English, three or more years of mathematics (including Algebra II), three or more years of laboratory sciences, three or more years of social sciences, and at least three years of one foreign language or two years each of two foreign languages. In addition to the core academic courses, elective credits earned in subjects such as art, computer science, drama, journalism, and music are appropriate. The University strongly recommends that candidates for admission pursue advanced, honors, dual enrollment, Advanced Placement (AP), International Baccalaureate (IB), or Cambridge courses when appropriate. To ensure success at the University of Mary Washington, the senior year in high school
is extremely important. Applicants should enroll in core academic subjects such as English, mathematics, laboratory sciences, social studies, and foreign language through the final term of high school.

Character, Personality, and Interests. The University welcomes recommendations from appropriate school officials. The recommendations should assess academic potential as well as character, personality, or interests. Activities that reflect leadership or intellectual interests are significant if they reinforce sound academic achievement. Since the University of Mary Washington operates under an honor system, assurance of personal integrity is essential.

Standardized Tests. Students applying for admission immediately following high school must submit official results of the College Board's SAT Reasoning Test or the ACT. Tests should be taken no later than January of the senior year of high school.

Admission Plans. Students applying for admission as freshmen may be considered under one of the following two plans:

Early Action. Students with exceptionally strong academic records who submit their applications by November 15 will be considered for early notification of their admission. The Committee will admit students under the Early Action plan on the basis of outstanding high school performance and standardized test scores. Students who receive Early Action admission will be notified by late January but need not make a commitment to attend the University until May 1.

Regular Admission. Most applicants will be considered for admission under the Regular Admission plan. All freshman applications for fall semester admission should be submitted by February 1; applicants who meet this suggested filing date will be notified of the admission decision by April 1 . Applications filed after February 1 will be considered as space permits. Various deadlines concerning final transcripts, deposits, and medical examinations occur following the offer of admission. All students accepted for admission will be sent the necessary information concerning these requirements. The University adheres to the May 1 National Candidates' Reply Date.

Deferred Enrollment. Accepted applicants may ask the University for the option of deferring enrollment for up to two consecutive semesters by notifying the Office of Admissions in writing. Any deposits paid by students who defer enrollment are held as a credit until the student matriculates. In cases involving military deployment, mobilization, or change in duty assignment, accepted applicants may request to extend the enrollment deferment for longer than two consecutive semesters. Any such requests will be considered on an individual basis. A copy of the person's military orders must be provided to the Office of Admissions to support such a request. Any accepted applicant who is eventually unable to matriculate to the University of Mary Washington because of military service will have any deposits fully refunded. Those who are granted deferred enrollment are subject to rules, regulations, and financial
charges in effect when they actually matriculate. Students who enroll at another institution before enrolling at the University of Mary Washington may not defer and must reapply for admission.

Advanced Placement, International Baccalaureate, and Cambridge. Students may apply for college credit through the examinations in various academic subjects given by the Advanced Placement Program of the College Board and through the International Baccalaureate examinations. The completed IB Diploma will earn a minimum of 15 credits. Prospective students may consult the University website or contact the Office of Admissions to request information on those AP and IB examination scores required for credit in particular subject areas. To apply for credit, students must have official examination results forwarded to the Registrar at the University before matriculation. The University of Mary Washington's CEEB code is 5398. Cambridge courses are evaluated by student request on an individual basis for college credit.

Dual Enrollment. Students earning college credit through dual enrollment while still in high school will have their credits evaluated for possible application toward degree requirements at the University of Mary Washington. Students participating in dual enrollment programs are considered as freshman applicants. Only official transcripts sent directly to Mary Washington from the credit-granting college or university will be evaluated for the awarding of dual enrollment or transfer credit.

## ADMISSION BEFORE HIGH SCHOOL GRADUATION

On occasion, the University allows students with exceptional ability to enroll prior to graduating from high school. Three arrangements cover most circumstances: admission to the summer session; admission to part-time study during the regular session; or admission after the junior year. Details are available from the Office of Admissions or the Office of Academic and Career Services.

## ADMISSION AS A TRANSFER STUDENT

The Transfer Admission Process. Prospective B.A. or B.S. program transfer students should submit the Common Application, UMW supplement and the non-refundable application fee as early as possible.

Transfer applicants must arrange for their secondary schools and all post-secondary schools attended to send official transcripts to the University of Mary Washington. Standardized tests are not required for applicants who have completed at least 30 transferable credits (semester hours) at an accredited post-secondary institution. The University should receive all materials by March 1 for the summer session, April 1 for the fall semester, and by November 1 for the spring semester. After these dates, the Admissions Committee will consider applications as space permits.

The Admissions Committee considers all aspects of the record in deciding whether or not to admit a transfer candidate. Factors considered in the selection process for transfer students include the application for admission, transcripts of all college work, high school transcripts, and standardized test scores. The admissions committee will place particular emphasis on the student's academic program and record of academic achievement in postsecondary course work. Candidates may be considered for transfer admission only if they are in good standing at the last institution they attended. This includes academic or social probation or suspension as well as satisfactory financial standing. Admission to the University does not guarantee admission to the College of Business or the College of Education.

Transfer Credit. Previous college course work will be evaluated for transfer credit following an offer of admission. As a rule, transfer credit is granted for courses of the same type, on the same level, and taught under the same guidelines as courses offered by the University of Mary Washington. Courses for which a student requests transfer credit must have a minimum grade of "C" ( 2.0 on a 4.0 scale) and must not overlap or repeat those which the student takes at the University. No credit will be awarded for courses taken on a pass/fail basis (except physical education courses when grades are not given), prior to matriculation. Transfer applicants should have official transcripts from other institutions sent directly to the Office of Admissions. Applicants also may be asked to provide a catalog or course descriptions for evaluating their credits. In order to receive transfer credit, students must submit official transcripts by the deadline.

## VIRGINIA STATE POLICY ON TRANSFER

Admission Criteria. The University of Mary Washington is committed to enrolling transfer students from the Virginia Community College System (VCCS) and Richard Bland College. Admission priority is extended to students who have completed specific Associate of Arts, of Science, or of Arts and Science degrees. Preference is also given to students from the local area. Admission to Mary Washington is competitive and the availability of transfer spaces varies from semester to semester. Admission criteria for applicants to the Bachelor of Liberal Studies (BLS) program specified below are different from those for the B.A. and B.S.; however, such applicants also are encouraged to complete an associate degree.

Acceptance and Application of Credits. Students who have earned a transfer associate degree (to include the General Studies degree only at certain approved VCCS campuses) prior to matriculating at Mary Washington will be considered to have attained junior status ( 60 or more credit hours) and usually to have met lower-division general education requirements, although additional speaking intensive, writing intensive, and foreign language courses may be required to meet the University's complete general education program.

The UMW Transfer Credit Guide, available on the University website (www.umw.edu), describes in detail the Virginia State Policy on Transfer and the University's implementation of that policy.

Guaranteed Admission Agreement. The University of Mary Washington and the Virginia Community College System (VCCS), recognizing the need to facilitate the transfer of students from the community college to UMW, have established a Guaranteed Admission Agreement (GAA). To be guaranteed admission to UMW, students must complete the requirements to become GAA students (graduation from a transfer-oriented degree program at a Virginia community college with a cumulative grade-point average (GPA) of 3.25 or higher on a four-point scale with intent to transfer to the University of Mary Washington) and submit an official transcript showing completion of the associate degree to the UMW Admissions Office. In addition, GAA students must have earned a grade of "C" or higher in each community college course applicable to the transfer-oriented associate degree program. Students who were previously enrolled at UMW and transferred back to a VCCS college to complete the transfer-oriented associate degree are not eligible for participation in the GAA. VCCS students who do not meet the terms of the GAA may still be highly competitive applicants and are encouraged to apply through the regular transfer admissions process. The University of Mary Washington reserves the right to deny admission to students who have been suspended or dismissed, or to those convicted of a crime other than a traffic violation. A similar GAA also exists between UMW and Richard Bland College.

## ADMISSION TO BACHELOR OF LIBERAL STUDIES (BLS) PROGRAM

The Bachelor of Liberal Studies (BLS) program is designed to meet the needs of non-traditional students who have some college experience and want to complete a bachelor's degree in the liberal arts or sciences. A typical BLS student has at least one of the following characteristics: graduated from high school at least six years ago, is a veteran or active-duty member of the U.S. Armed Forces, is married, has legal dependents, or is financially selfsupporting.

Students in the BLS program may choose from a multidisciplinary major in Leadership and Management, open only to students in the Bachelor of Liberal Studies degree program, any of the majors available to arts and sciences degree students or they may create a self-designed, interdisciplinary major (subject to approval by the Bachelor of Liberal Studies Committee).

To be admitted to the BLS program, applicants must have completed 30 transferable college credits with a minimum grade-point average of 2.5 . A minimum of 15 of these credits should come from college courses taken at a regionally-accredited institution; non-traditional credits (for example, credits earned through the College Level Examination Program, credits for military
experience or training, and credits documented by a life/work experience portfolio) are also accepted in transfer to the BLS program.

Students may begin the program in the fall, spring, or summer. Prospective students should complete their applications by the established priority dates in order to allow for advanced course registration. Specific details and application dates are available in the current admission publications and on the University website. Applicants should submit an application, a nonrefundable application fee or official fee waiver, essays, documentation of high school completion or the equivalent of an associate degree, and official college transcripts from all institutions attended. Additionally, any standardized test scores or military course work transcripts may be sent to the Office of Admissions to be considered for academic credit.

Students who have registered for classes in the B.A. or B.S. program at UMW within the past calendar year and who have completed more than 30 credits at the University of Mary Washington may not enroll in the BLS program. The BLS degree requires 120 semester hours of course work for graduation distributed in three categories: general education, electives, and major. Courses that meet BLS Across-the-Curriculum requirements must be included in the student's program of study. At least 30 credits must be taken at the University of Mary Washington after admission to the program. A cumulative GPA of 2.00 on all Mary Washington work is also required.

## ADMISSION TO BACHELOR OF SCIENCE IN NURSING (BSN) PROGRAM

The Bachelor of Science in Nursing (BSN) Completion Program a postlicensure degree program and is administered by the College of Arts and Sciences.

To apply for the program, the applicant must submit the following items to be considered for admissions to the program:

1. Completion of the Application for Undergraduate Degree Completion Programs (BSN)
2. A copy of a current, unencumbered RN license which permits them to practice nursing in the Commonwealth of Virginia.
3. An official transcript from each college or university attended, including an official transcript awarding an associate degree or diploma from an accredited school. Applicants must have attained a minimum cumulative grade point average of 3.0 on a 4.0 scale in undergraduate study.*
4. A resume or CV.
*If an applicant's undergraduate GPA is less than 3.0, his/her application will be reviewed by the BSN Completion Program Admissions Committee. In addition, the applicant is advised to include the following:

- Two satisfactory academic and/or professional recommendations (recommended)
- An interview with the admissions committee, if requested.

All four of the required items listed must be received by the admissions office before a decision can be made. The admissions office will notify applicants by letter. Following acceptance, the student will be contacted by the director of the BSN Completion Program for advisement and registration.

Agreements with Germanna Community College Nursing Program. The University of Mary Washington (UMW) and Germanna Community College (GCC), recognizing the need for registered nurses (RNs) to achieve baccalaureate degrees in nursing through an education system which promotes seamless academic progression, have adopted three agreements.

1. Bachelor of Science in Nursing (BSN) Completion Program Direct Transfer Articulation Agreement (BSNCP-DTAA). Commonly referred to as the $3+1$ BSN Plan, this agreement guarantees admission to GCC nursing students who meet the admissions criteria UMW has established for the BSN Completion Program. Applicants complete the same admission process for the BSN Completion Program; in addition, the applicant submits a Letter of Intent for the plan.
2. Bachelor of Science in Nursing (BSN) Concurrent Enrollment Plan (BSN-CE). This agreement permits GCC nursing students to be concurrently enrolled in the BSN Completion Program while completing an Associate of Applied Science (AAS) degree in nursing. Applicants complete the same admission process for the BSN Completion Program; in addition, the applicant submits a Letter of Intent for the plan.
3. Bachelor of Science in Nursing (BSN) Academic Partnership Plan (BSN-APP). Commonly referred to as the $1+2+1$ BSN Plan, this agreement is designed for UMW students who are interested in earning a pre-licensure Associate of Applied Science (AAS) degree in nursing from GCC and a postlicensure BSN from UMW. This plan is only available to incoming freshman and is limited to twenty students. Students who are interested in the program complete the freshman student application process. In addition, students declare their intended major as "pre-BSN" and complete ATI's Test of Essential Academic Skills V (TEAS V) by April 1st. The ATI TEAS V can be completed through TEAS at PSI (identify Germanna Community College as the program) or at Germanna Community College Testing Centers in Fredericksburg or Locust Grove. Additional information can be found at www.atitesting.com/ ati_store/ or www.germanna.edu/testing/nursing-health-testing.asp

Incoming students interested in the program are ranked by their High School grades in Chemistry, Biology, Algebra and TEAS V score. The top 20 students are selected for the program. The remaining students are individually advised and may include advisement to apply to the spring GCC Nursing cohort.

## ADMISSION AS A NON-DEGREE-SEEKING STUDENT

Non-degree-seeking students are permitted to enroll in courses on any campus of the University of Mary Washington but are not matriculated in a degree program. An abbreviated application form is required. Admission decisions are made by the Registrar at the time of enrollment.

Non-degree-seeking students may register for as many as 11 credits per semester and pay tuition according to the number of enrolled credits. Under certain conditions, a non-degree-seeking student may seek permission from the designated university official to exceed the 11-credit limit. Non-degree students wishing to apply for admission to a UMW degree program must do so before completing 30 credits in residence.

## ADDITIONAL REQUIREMENTS FOR INTERNATIONAL STUDENTS

In addition to the documents required for the admission process for each degree program, applicants who are non-US citizens or permanent residents must submit original academic records and, if those records are not in English, certified copies of the records translated into English. If the student has been educated in a non-English speaking country, all transcripts and documents must be submitted via an approved independent credentials evaluation service. If English is not the applicant's native language, the University of Mary Washington requires the applicant to demonstrate English competency, normally by submitting results of the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) or by completing ELS Educational Services Level 112.

Visa Information. Non-U.S. citizens who are not permanent residents may need to obtain a student visa. To obtain a visa, a student must be accepted for admission, pay the deposit, and submit an Affidavit of Support. Once the Affidavit of Support is accepted by the University, the student is issued the I-20 Form (Certificate of Eligibility for Non-Immigrant) to present to the U.S. consul or embassy in the country where the student will be issued an F-1 Visa to study in the United States. Students who are on F-1 Visas must carry a fulltime course load while enrolled at the University.


## FEES AND FINANCIAL AID

## TUITION AND FEES

Tuition and Fees are approved by the Board of Visitors prior to each academic year. The yearly tuition and fee schedule can be found on the Student Accounts website (adminfinance.umw.edu/ studentaccounts). Any changes to the schedule of fees will be announced immediately. Questions about fees and payment procedures should be directed to the Office of Student Accounts in Lee Hall (540/654-1250). Questions about financial aid or assistance should be addressed to the Office of Financial Aid in Lee Hall (540/654-2468).

Residential Fee. The residential fee is the cost per semester for University housing.

Meal Plans. University of Mary Washington offers a variety of meal plans. For information about meal plan options, please visit the Student Accounts web page. Each meal plan comes with flex dollars, which may be used to purchase additional meals or to eat in the Eagle's Nest or the Underground. EagleOne Dollars may also be used for additional dining meals. All residential students are required to enroll in a meal plan. The meal plan required depends on where the student resides. All freshmen are required to have the largest meal plan of those being offered. Commuting students may sign up for any of the plans offered at UMW.

## UMW EAGLEONE CARD

The University of Mary Washington EagleOne Identification Card is the only card a student needs at the University. The card acts as a form of identification allowing access to the library, gymnasium, residence halls, and other University buildings and activities. It contains the students' meal plan and flex dollar information for University food service. It is also a debit card. Money may be added in the form of EagleOne Dollars, which can then be debited from the balance for use in the University Bookstore, the Eagle's Nest, the Underground, dining in the new University Center, Blackstone Coffee at the Convergence Center, UMW Health Center, laundry, vending, University Tennis Center, theatre productions, pay-to-print and cloud printing, Copy Center, Post Office, EagleExpress Cart, and other locations on campus.

Fredericksburg area merchants also accept the EagleOne card as payment. A list of participating merchants is available online at adminfinance.umw.edu/ eagleone/eagleone-off-campus-2/. EagleOne cardholders may check their account balances, deposit funds, and download statements at eagleone-sp. blackboard.com/eAccounts/AnonymousHome.aspx.

## OTHER FEES

All other fees vary by academic year. For the most up-to-date fees please visit the Student Accounts website (adminfinance.umw.edu/studentaccounts). The University does not charge an additional fee for taking online courses.

Mandatory Processing Fee. A non-refundable mandatory processing fee is charged to any student who registers for classes. If the student cancels prior to the semester beginning or withdraws during the semester he or she is still responsible for paying the mandatory processing fee.

Audit Fee. This fee is incurred when students take a course for no credit, and is charged to all part-time students who audit a class and any full-time students whose semester course load exceeds 18 credit hours by virtue of the audited course. Auditing a course is permitted on a space-available basis in courses where approval to audit is granted.

Tuition Overload Fee. A full-time student registering for more than 18 semester credit hours is required to pay an additional overload fee based on his or her residency.

Credit-by-Examination. Degree-seeking students are charged a fee when taking examinations for which credit may be awarded.

Special Course Fees. Some classes require the payment of a special instructional fee in addition to the tuition charge.

Study Abroad Fee. All students studying abroad must pay the study abroad fee. The fee applies to all education abroad programs occurring in the winter, spring break, summer session, semester, or the full academic year.

Late Payment Fee. A fee, which is 10 percent of the unpaid account balance (up to \$250), will be charged to students whose accounts are not paid in full by the invoice due date. Interest may also be charged on all past due accounts.

Returned Payment Fee. There is a service charge for each check/e-check returned for insufficient funds or similar reasons. A cashier's check or cash is then required in place of the returned payment. Payments returned for insufficient funds will be considered as nonpayment and subject to the 10 percent late fee.

Parking Fee. There is a parking fee and students should visit the Parking Management office's website (adminfinance.umw.edu/parking) for more details.

## TERMS AND METHODS OF PAYMENT

University of Mary Washington accepts payments in a variety of ways. For complete details, see the Office of Student Accounts web page regarding "Method of Payment," found at adminfinance.umw.edu/studentaccounts/ methods-of-payment.

All fees, including room and board, are billed to students through EaglePAY within the student's portal and are payable in advance of the beginning of the semester. If a student wishes to designate additional authorized payers, he/she may do so through EaglePAY. This will allow those authorized by the student to access the student's bill. For further instructions, please contact the Office of Student Accounts.

Room and Tuition Deposits. After receiving notice of acceptance for admission students must make a deposit (\$500 for residential students, \$250 for non-residential students). Please note that for residential students only $\$ 250$ will be credited to the account and the other $\$ 250$ will be held as a contingent fee to be refunded less any outstanding balance at the point they either graduate or move off campus.

Statements and Due Dates. The University emails each student a notification that a bill is available for viewing online well in advance of the beginning of each semester. Payment is due by the date specified on the statement. Payment plans are offered to degree seeking students through a third party approved by the University. If you are interested in this option please visit the Student Accounts website (adminfinance.umw.edu/studentaccounts).

If a full-time student has not received a statement of charges within 20 days before the beginning of the semester, the student should notify the Office of Student Accounts as soon as possible.

Throughout the semester a student's account may include any charges incurred for library fines, lost library books, parking tickets, prescriptions, lost keys, building and equipment damage, and other miscellaneous charges. Any student whose full account has not been settled may not receive grades or transcripts, be able to pre-register for classes, or be eligible to return to the University until the account is settled.

Scholarship and Loan Awards. Normally, one-half of the annual financial aid awarded through the Office of Financial Aid is shown on each semester statement. If state, federal or UMW grants/scholarships that were awarded are not credited on the statement, the student may check the EagleNET portal for missing documents and then contact the Office of Financial Aid. Some scholarships are not paid until the successful completion of the semester. In these cases, the bill must be paid in full by the due date to avoid late charges.

A student receiving financial aid from a source other than the University must make sure that payment is received prior to the statement due date. If an official notification can be provided to the Student Account's office from the source; that lists the date of the award, its amount and the method of payment;
then an extension will be granted to the end of the first week of classes. Failure to provide official notification could result in a student's account being delinquent. Awards and loans from sources other than the University will not be credited to the account until they are actually received at the Cashier's Office. One half of the award will be shown on each semester unless otherwise directed in writing by the granting source.

Delinquent Accounts. Any charge incurred in collecting a delinquent account will be added to the account. This applies but is not limited to fees charged by an attorney or collection agency.

Refund of Fees. A student who withdraws from the University during the semester should promptly complete an official withdrawal form in the Office of the Registrar in Lee Hall (Fredericksburg campus) or on the Stafford campus. A copy of the form must be sent or delivered to the Office of Student Accounts and will serve as the basis for withdrawal charges and credits.

Students who are in military service (active duty, reserves, or National Guard) and withdraw from all courses in a given term as a result of a military deployment, mobilization, or change in duty assignment will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Military change orders must be provided to the Office of Student Accounts. Any deposits paid by students who discontinue enrollment as a result of a military service obligation will be fully refunded. Textbooks purchased from the UMW Bookstore may be returned to the University Store for credit in accordance with the UMW textbook return policy. For withdrawals occurring beyond return policy end date, students should bring books to the Bookstore for the best available buyback prices.

## CLASSIFICATION AS A VIRGINIA STUDENT

The Code of Virginia, section 23-7.4, governs eligibility for in-state tuition rates at Virginia public institutions of higher education. Please refer to the State Council of Higher Education for Virginia website (www.schev.edu/Students/ VAdomicileguidelines.asp) for clarification on eligibility and any changes to the Code of Virginia regarding tuition benefit provisions.

In general, an independent student, or the parents or legal guardians of a dependent student, must have been legally domiciled in the Commonwealth of Virginia for one full and continuous year immediately before the first official day of class within the semester or term of the student's program and must have paid Virginia state income tax on a full-time salary for that full year. Living in the state primarily to attend school does not constitute legal domicile. Certain exceptions are made for military personnel and their dependents. Detailed questions about domiciliary status are part of each application for admission. Questions about residency status should be directed to the Office of Admissions (540/654-2000), or Office of Student Accounts (540/654-1250).

## SENIOR CITIZENS

A legal resident of Virginia 60 years of age or older shall be permitted under regulations prescribed by the State Council of Higher Education to (1) register for and enroll free of charge in courses as a full-time or part-time student for academic credit if such citizen has an individual taxable income not exceeding $\$ 23,000$ for federal income tax purposes for the year preceding the year in which the enrollment is sought, (2) register for and audit courses offered for academic credit, and (3) register for and enroll in non-credit courses in any state institution of higher education in this Commonwealth on a space-available basis.

Senior citizens pay no tuition or fees except fees established for the purpose of paying for course materials, such as laboratory fees, but shall be subject to the admission requirements of the institution and a determination by the institution of its ability to offer the course or courses for which the senior citizen registers.

A legal resident of Virginia 60 years of age or older with Federal taxable income not exceeding $\$ 23,000$ may audit credit courses or enroll in non-credit courses without paying general University fees, but must pay general University fees to take courses for University credit. Additional information is available through the office of the Registrar (540/654-1063).

## VIRGINIA MILITARY SURVIVORS AND DEPENDENTS EDUCATION PROGRAM

The Virginia Military Survivors and Dependents Education Program (VMSDEP) provides education benefits to spouses and children of military members killed, missing in action, taken prisoner, or who became at least 90 percent disabled as a result of military service in an armed conflict. VMSDEP provides educational benefits for children of certain Virginians who served in the Armed Forces of the United States. Eligible children attending public colleges and universities in Virginia are admitted free of tuition and all required fees. (See the Code of Virginia, Section 23-7.4:1.)

In addition, VMSDEP students are also eligible for a full-time or parttime student stipend that is processed through the State Council of Higher Education of Virginia (SCHEV). SCHEV provides a roster of eligible students who have identified their intention to attend UMW to the Office of Financial Aid who in turn certifies that the students are attending and are eligible to receive the stipend payment. Because there may not be sufficient funding to make full VMSDEP stipends to all eligible students, a priority funding system is used by SCHEV to determine the order and amount of stipends. Students in a higher Priority category must receive their full projected annual stipend, as determined by SCHEV based on student enrollment level, before subsequent categories are considered for funding.

Only students appearing on the verification rosters released by SCHEV to the institutions will be funded for the terms specified as authorized, regardless
of certification/verification from any other source. For more information on the priority dates, visit www.schev.edu.

Additional information is available through the Office of Student Accounts (540/654-1250) or the Office of Financial Aid (540-654-2468).

## VETERANS BENEFITS

Students who have questions about Veteran Affairs (VA) benefits prior to admission should address inquiries to the Veterans Inquiry Unit at the U.S. Department of Veterans Affairs Regional Office, 210 Franklin Road S.W., Roanoke, VA 24011, 888/442-4551, www.va.gov/gibill. Students who have questions about VA benefits after admission should address inquiries to the Office of the Registrar.

Under the provisions of the Veterans Access, Choice, and Accountability Act of 2014, the following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill -Active Duty Program) or chapter 33 (Post9/ 11 G.I. Bill), of title 38, United States Code, who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. $\$ 331$ l(b)(9)) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal State of residence) and enrolls in the school within three years of the Service member 's death in the line of duty following a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge, release, or death described above and must be using educational benefits under either chapter 30 or chapter 33 , of title 38, United States Code.


## FINANCIAL AID

All need-based financial assistance, including need-based scholarships and grants, offered through the Office of Financial Aid requires the results from the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov. Meeting published filing dates is critical to receiving financial aid. All students must file the FAFSA on or before March 1. The Federal (Title IV) school code for the University of Mary Washington is 003746.

Priority for all scholarships and grants is given to students who maintain a minimum 2.0 UMW cumulative grade point average. Many programs require a higher grade-point average. Students who are Virginia residents with demonstrated need may be eligible for Virginia state scholarships and grants. Critical financial aid information, including general information, filing instructions, federal loan information, enrollment requirements, scholarship opportunities, student employment and forms for both campuses is available at adminfinance.umw.red/financialaid. Visit the Financial Aid Office on Facebook at www.facebook.com/UMWfinaid.

All students selected for verification, as well as parents of dependent students selected for verification, must submit copies of requested documents to the Office of Financial Aid by June 1. Students not meeting filing and submission dates will be considered for assistance AFTER on-time filers. Since funds are limited, this may result in otherwise eligible students not receiving awards. Students must be enrolled at least half-time to receive aid. Detailed information regarding eligibility and enrollment status is available on-line.

Satisfactory Academic Progress Policy. There are two requirements to be met to continue receiving financial aid. Student must successfully complete a minimum of $70 \%$ (no rounding up) of the credit hours attempted in each semester (fall, spring, and summer sessions, if applicable). Satisfactory Academic Progress is checked at the end of every semester for every student. The second requirement is the cumulative GPA as calculated at the end of each semester. Students must maintain a specific GPA based on their grade level standing at the end of each semester. A 1.8 GPA for Freshmen, 1.9 GPA for Sophomores and a 2.0 GPA for Junior and Seniors. Graduate students must maintain a GPA of 3.0 as required by their program.

Based on those findings, individual students who fail to meet one or both of the requirements may receive a one semester warning period. Only one warning will be granted and only to a student who in the previous semester was maintaining academic progress or enrolled in their first semester at UMW. Students still not meeting progress guidelines after the warning period will not be eligible to receive further financial aid until the two requirements will be notified at their permanent home addresses, regardless of whether or not they intend to apply for financial aid.

Example: students enrolled for 15 credit hours during a semester must successfully complete 10.5 credit hours and earn the appropriate GPA. Part-
time students enrolled in a total of 9 credit hours for the academic year must successfully complete 6 credits and maintain the same GPA.

Coursework transferred from other institutions are included in the total number of earned and attempted credit hours, but are not factored into the cumulative grade point average. Repeated coursework is not always eligible for consideration in this policy and could effect your financial aid eligibility. Visit the Financial Aid web site for further details.

Priority for all scholarship and grant funds is given to students who achieve and maintain a minimum cumulative 2.000 grade point average. However, many UMW scholarship programs require a higher cumulative grade point average.

Scholarships. Current students may apply for UMW endowed scholarships by completing the online Scholarship Application Form on or before June 1 at www.umw.scholarships.ngwebsolutions.com. Scholarship selection is based on academic and/or financial criteria and some qualifications can include participation in various volunteer and leadership positions. Students must complete the FAFSA to determine eligibility for need-based scholarships. Returning student recipients are selected through committee during the month of June for the following academic year. New students are reviewed for eligibility and are selected for endowed scholarships prior to the May 1 National Response Deadline, when possible.

Military Deployment. Students who are in military service (active duty, reserves, or National Guard) and withdraw from all courses in a given term as a result of a military deployment, mobilization, or change in duty assignment will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Any deposits paid by students who discontinue enrollment as a result of a military service obligation will be fully refunded.

Students receiving financial aid who withdraw from UMW due to military deployment will have all of their financial aid returned to the appropriate funding source once the tuition and fees are reversed. Student should notify the Office of Financial Aid of their deployment and provide a copy of their orders. For additional information, refer to the Terms and Methods of Payment section..

Withdrawals and Financial Aid. Federal regulations require that financial aid funds be returned to the appropriate programs when a student receiving financial aid withdraws from UMW. Students who reduce their course loads or completely withdraw from UMW may owe refunds to federal, state, or institutional programs. The return of federal funds is calculated in accordance with federal guidelines and is prorated based on the actual days the student attended classes.

For example, a student enrolled in the fall semester has 110 calendar days in that term. The student withdraws on the 29th day. The student has earned $26.4 \%$ of their financial aid prior to their withdrawal (29/110 rounded to the nearest tenth of a percentage). Their financial aid funds for the semester are
multiplied by $26.4 \%$ and applied to the student's account. The remaining $73.6 \%$ is returned to the appropriate federal or state program.

Be aware that a return of financial aid funds may cause a tuition bill that will need to be paid by the student. It is recommended that a student meet with the Office of Financial Aid prior to withdrawing to determine the effect of the withdrawal on their financial aid funds..


## STUDENT LIFE

## STUDENT GOVERNMENT

Internal governance for student life is provided by the Student Government Association. Its executive officers and the members of the Student Senate are elected each year. They, in turn, appoint students to serve on a variety of student committees and on nearly all faculty and administrative committees at the University. A second elected group, Class Council, is responsible for social programming and many of the University's traditional events. The Honor Council, with elected representatives from each class, presides over the Honor System.

## STUDENT ACTIVITIES AND ORGANIZATIONS

A new University Center, opening in fall 2015, will be the "living room" of campus as the new home of student activities and organizations as well as UMW Dining Services. Woodard Campus Center contains a post office and student mailboxes and the Eagle's Nest food court. Lee Hall is home to "The Underground" where entertainment abounds throughout the week - from Bingo and trivia games to local bands, Karaoke, and open mike nights. The Anderson Center offers an expansive venue for sports and major concerts and performers.

Through the Inter-Club Association, the Student Government Association recognizes over 130 social, cultural, political, religious, and other special interest clubs and organizations which offer a wide range of activities throughout the year. Also, students find it easy to start new groups. In addition, most academic departments support interest clubs or honorary societies. Student-run campus publications and radio provide outlets for students to share their thoughts and talents. The University has a weekly newspaper, The Blue and Gray Press; a yearbook, The Battlefield; a biannual literary magazine, Aubade; and a campus radio station, WMWC.

## RESIDENCE LIFE

Students who reside on campus have a variety of options available to them within the fifteen traditional residence halls and two apartment-style complexes. All campus communities are staffed with resident assistants who help to implement the residential curriculum as well as being trained as peer resources to help assist students in day-to-day university life. Each residential complex is overseen by a professional live-in staff member.

Students in residence halls participate in Self-Determination by Community Standards which allows them to establish behavioral guidelines for their hall community and to hold one another accountable for upholding those guidelines. They also have the opportunity to participate in their individual complex councils, which gives them the opportunity to have a voice in complex governance, budgeting and social programming for the community.

Upper-class students have the option to create their own themed housing communities through the "Conceptual Living" program. First-year students are assigned to residence halls based on their Freshman Seminar classes and will benefit from the newly developed first year experience program.

All traditional residence halls are equipped with lounges, study areas, microwaves and common area refrigerators. Rooms are equipped with extralong double beds, desks, desk chairs and dresser and closet space. Some residence halls have fully equipped kitchens. Custis Hall and Ball Hall are single-sex female residence halls with all other halls being co-ed.

Eagle Landing is a luxury apartment-style residential community for sophomores, juniors, seniors, and graduate students. The complex features loftable beds, stainless steel appliances, and granite counter tops. The UMW Apartment complex houses upper-class students in apartments similar to those you'd find off campus. Both Eagle Landing and the UMW Apartments remain open during all break periods..

## COMMUTER STUDENT SERVICES

Commuter Student Services is committed to helping those who live offcampus have a successful experience at the University of Mary Washington. We are dedicated to helping commuters feel connected and supported. Our programs and services are designed to provide you with opportunities to meet other UMW commuters, be informed of campus events, make connections on campus with staff and faculty, and have a resource when you have questions about off-campus living.

## MULTICULTURAL STUDENT AFFAIRS

The University of Mary Washington continually and actively seeks a rich blend of cultural diversity in its faculty and staff, students, curriculum, and activities. The James Farmer Multicultural Center, named after the prominent civil rights leader who taught at the University of Mary Washington, specifically focuses on the academic and social well-being of underrepresented students through programming, mentoring, and leadership opportunities. The Center also offers a wide variety of cultural programming including the highly respected Cultural Awareness Series which spans the academic year. The programs and activities for the various cultural celebrations highlight and enhance the education and appreciation of differences across the campus
community. The series culminates with the Multicultural Fair which attracts regional attendance.

While diversity is a goal for all University organizations, several specific interest groups on campus assist in promoting diversity within the University community and offer programs and resources that foster an awareness and understanding of cultural differences including the Asian Student Association, the Black Student Association, Brothers of a New Direction, the Latino Student Association, Islamic Student Association, Jewish Student Association, S.E.E.D. (Students Educating and Empowering for Diversity), PRISM (People for the Rights of Individuals of Sexual Minorities), and Women of Color. Through these many efforts the University strives to achieve greater diversity in its population and a full measure of respect for, and appreciation of, the cultural traditions of all people.

## HEALTH CENTER

The Student Health Center offers full-time students a self-care center and outpatient medical services Monday through Friday. A full-time physician, two nurse practitioners, and registered nurses, as well as access to local area specialists, give students a comprehensive medical resource. There is no pervisit charge, but there may be additional charges for prescriptions, injections, and medical supplies.

## TALLEY CENTER FOR COUNSELING AND PSYCHOLOGICAL SERVICES

The mission of the Talley Center is to help students meet the demands of college effectively and support their personal, social, and intellectual growth and development. The Talley Center staff includes licensed clinical psychologists, licensed professional counselors, and masters- and doctorallevel interns from graduate programs in counseling and psychology. The Talley Center provides individual and group counseling services to full-time, undergraduate, degree-seeking students enrolled on the Fredericksburg campus. The Talley Center also provides limited, short-term psychiatric services by referral. We offer crisis intervention, consultation, community referrals, and training and educational outreach programs to the entire UMW community. All services are confidential and free of charge.

Student concerns vary considerably and may range from typical developmental issues, including University adjustment, relationship concerns, and stress management to problems with depression, anxiety disorders, bereavement, and trauma.

## CAMPUS RECREATION AND FITNESS CENTER

Students enjoy a comprehensive recreation program with something for everyone. Intramural sports events range widely from team leagues in
basketball and flag football to retro events like dodgeball and kickball. The Eagle sport club program offers opportunities for intercollegiate competition in many sports including baseball, basketball, boxing, fencing, ultimate Frisbee, lacrosse, rugby, soccer, synchronized swimming, and tennis. Group fitness classes and a Wellness Resource Center are housed in the state-of-the-art Fitness Center along with cardiovascular, free weight, and circuit equipment. The Campus Recreation Field complex offers synthetic recreation field surfaces with advanced lighting for intramural and sport club use, softball and baseball diamonds, and a premier beach volleyball court.

## CENTER FOR HONOR, LEADERSHIP, AND SERVICE

The Center's guiding vision is to inspire and prepare UMW students to engage as global citizens, leading fulfilling lives grounded in the values of honor, leadership, and service. Center staff and resources help students turn passion into action by connecting them with all three facets of the Center's mission.

The Center is home to the student-led Honor Council, which focuses on promoting "honor as a way of life" at Mary Washington and COAR, UMW's most active service organization. We believe that leadership comes from relationships, not formal positions, and the Center offers all students the opportunity to find ways to make a difference in clubs, organizations, classwork, and other areas of life through enhancing their leadership skills. Students have opportunities to learn about the impact service can have and individual and cultural differences by participating in ongoing service projects and onetime special events with COAR and other student-run service organizations. UMW students annually contribute thousands of hours of service to the local community and service projects, earning UMW national recognition with a place on the President's Community Service Honor Roll.

## BOOKSTORE

The University Bookstore is proudly owned and operated by the University of Mary Washington. The store team is dedicated to supporting the academic mission of UMW and the quality of student life on campus. All profits generated by the Bookstore flow directly back to the University to help fund student life programs, intramural sports, recreational activities, and more. The store employs 15-20 students per semester.

The professional UMW Bookstore team ensures that competitively priced course materials are offered in store and online in the forms of new, used, e-books and course packets, art supplies and kits, DVDs, and more. Textbooks can also be rented online at umw.edu/bookstore. From Art to Theatre, Apple accessories to TI scientific calculators, the store has the materials required for academic success.

The store is the nest of Eagle Pride, offering UMW apparel, gifts, insignia and emblematic school supplies; the trade book department boasts the work of

UMW faculty, staff, and alumni, and offers a rich array of local history titles. Snacks, sundries, health and beauty items fill the well-stocked convenience store.

The UMW Bookstore is located in Lee Hall. Phone: 540/654-1017; umw.edu/ bookstore.

## UNIVERSITY POLICE

The University Police offer around-the-clock law enforcement and security for the Fredericksburg campus. They employ a community policing philosophy that includes outreach efforts to the University and local community. The 15 full-time sworn officers are certified by the Commonwealth of Virginia to enforce state and local laws and ordinances as well as University rules and regulations. The University employs security personnel at the Stafford and Dahlgren campuses during class and library hours, with back-up from UMW Police and Stafford or King George County sheriffs' departments, as necessary.

## JUDICIAL AFFAIRS AND COMMUNITY RESPONSIBILITY

The Office of Judicial Affairs and Community Responsibility educates students about conduct issues affecting the University community, and holds students accountable, through informal and formal disciplinary procedures, for conduct that might disrupt their learning or the learning of those around them. Educational programs about alcohol and other drugs, relationship violence, ethics, and the judicial process in general are available through this office. Students are encouraged, through a bystander intervention approach, to take action when they become aware of a situation that could cause harm or risk to the community, or to anyone within it. This office supports, upholds, and complements the Statement of Community Values and the University's overarching academic mission.

## ATHLETICS

The University has 21 men's and women's NCAA Division III teams for intercollegiate competition. Men's teams compete in baseball, basketball, cross country, lacrosse, rowing, soccer, tennis, swimming, and indoor and outdoor track and field. Women's teams compete in basketball, cross country, field hockey, lacrosse, rowing, soccer, softball, swimming, tennis, volleyball, and indoor and outdoor track and field. Men and women compete together in riding. (Men's golf will be added for 2016-17.) UMW competes in the 10-member Capital Athletic Conference (CAC).

In 2013-14, seven UMW teams or members of those teams advanced to national championship tournaments. UMW captured five conference championships, seven athletes were named CAC Athletes of the Year, three coaches were named CAC Coach of the Year, and three athletes were named CAC Rookie of the Year. UMW has won 12 CAC All-Sports Awards since 1991
(including in 2013-14) and nine Eagle athletes achieved All-American status in 2013-14. Over 50 percent of all athletes achieved a 3.0 or better grade-point average, six athletes were named Academic All-Americans, and six athletes were named to the Virginia Academic All-State Team for academic and athletic excellence.

The new Anderson Events Center seats 1,800 spectators for sports, and 2,000 spectators for concerts. The Goolrick physical education building provides a basketball gymnasium, dance studios, an intercollegiate swimming pool with electronic touch time system, an auxiliary gymnasium, an 8,000 -square-foot weight training room, a handball-racquetball court, three competitive volleyball courts, two indoor batting cages, and two athletic training rooms. A 15,000 square foot fitness center is connected to Goolrick and is open seven days per week. A six-court indoor tennis center is a great resource for student athletes and the campus community. State-of-the-art outdoor facilities include fields for baseball, soccer, lacrosse, softball, and field hockey; three artificial surface fields (two lighted); cross country courses and a running trail; 12 lighted tennis courts; and an eight-lane, 400 -meter Rubaturf all-weather track.a basketball gymnasium, dance studios, an intercollegiate swimming pool with electronic touch time system, an auxiliary gymnasium, an 8,000 -square-foot weight training room, a handball-racquetball court, three competitive volleyball courts, two indoor batting cages, and two athletic training rooms. A 15,000 square foot fitness center is connected to Goolrick and is open seven days per week. A six-court indoor tennis center is a great resource for student athletes and the campus community. State-of-the-art outdoor facilities include fields for baseball, soccer, lacrosse, softball, and field hockey; three artificial surface fields (two lighted); cross country courses and a running trail; 12 lighted tennis courts; and an eight-lane, 400 -meter Rubaturf all-weather track.

## FOR FURTHER INFORMATION

Additional information on Student Life will be found in the University of Mary Washington Student Handbook, updated annually and available at www.publications.umw.edu/student-handbook.

# ACADEMIC RESOURCES 

## UNIVERSITY LIBRARIES

The UMW Libraries constitute the knowledge center of the university -- a physical and virtual manifestation of the institution's mission of connected, integrated, and engaged teaching, learning, research, and service..
During regular semesters, Simpson Library is open with full-service for 90 hours each week. During Reading Days/Exam Week, the Library is open 24/7. Many of its resources are available at all times via the Internet. The Libraries' collections contain more than 380,000 cataloged items including books, serials, audiovisual materials, and an extensive microform collection of newspaper and periodical back issues. The Libraries provide access to more than 45,000 serial publications-many of them online-and some 76,000 electronic books. The Libraries also provide access via the Internet to an extensive array of electronic databases. The Libraries add 4,000 or more volumes to their collections each year to support the University's wide-ranging curriculum. An official partial depository of both Federal and state government publications, the Libraries also maintain an online digital repository, a rare book collection, and the archives of the University. The University of Mary Washington is an active member of VIVA (The Virtual Library of Virginia) a consortium of colleges and universities in Virginia that provides students and faculty access to a rich array of electronic resources through the campus network. VIVA resources range from online encyclopedias and dictionaries to bibliographic databases and full-text periodical services.

One of the largest buildings on the Fredericksburg campus, Simpson Library is connected to the Information Technology Convergence Center by a bridge leading from the library's second floor to the ITCC's third floor. The library staffs a service desk in the ITCC that is equipped with a self-service checkout system. The ITCC also includes the library's Digital Archiving Lab and Digital Gallery.

Simpson Library includes spaces for group and individual study, including the popular "treehouses" - double-decker study carrels located on the third floor. UMW's ThinkLab maker space is also located in Simpson Library.

The Libraries also provide wireless access to the campus network. The online VIRTUA catalog provides access to the Libraries' print and electronic
collections. A full range of instructional services is offered to faculty and students to aid in the use and interpretation of the Libraries' resources, research methods and the efficient use of new information technologies. Librarians teach a wide array of course-related instruction in addition to the provision of reference assistance. The Libraries also support an efficient interlibrary loan service.

The Stafford Campus Library, located on the second floor of the South Building, is a branch of UMW Libraries that serves the students, faculty, and staff located at the Stafford campus. Working in coordination with Simpson Library, the Stafford Campus Library provides access to physical and online resources in support of the courses offered at the Stafford campus. The library's physical collections consist of books, media, and periodicals focusing on business, education, and information systems. Additionally, a children's literature collection, student research projects, and course reserves are also available.

Campus Library offers a document delivery service which allows the faculty and students at the Stafford campus to have full access to the collections available at Simpson Library on the Fredericksburg campus. Open conversation areas and comfortable seating provide a welcoming environment for individual and group study, and 20 networked computers provide access to the Internet, the University's network, and the Microsoft Office Suite. The library staff is available to provide assistance to groups and individuals, and librarians are available to provide in-class or online library instruction sessions. Online tutorials and research guides specific to the Stafford campus community are available on the UMW Libraries' website. Wireless access, printing and photocopying are among the other services available at UMW Libraries' Stafford location.

## INTERNSHIPS

The Office of Academic and Career Services coordinates the program of academic internships, through which qualified students work in professional settings to enhance their readiness for the transition from college to career and the world of work. Academic departments sponsor these internships, under the joint direction of a faculty member and an on-site supervisor, and award academic credit for their successful completion. Guidelines for academic credit vary from program to program; therefore, students are encouraged to review specific internships requirements of the academic program which sponsors the internship.

The Office of Academic and Career Services maintains an online database of internships. Current internship policy and procedure guidelines are available from the Office of Academic and Career Services.

## CAREER AND PROFESSIONAL DEVELOPMENT

The Center for Career and Professional Development, located just off the "living room" of the new University Center, is the place where UMW's institutional capacities converge to support and inform student transitions from college to career and the world of work. Its central placement symbolizes the University's core belief that the liberal arts and sciences education prepares students for meaningful post-graduation opportunities as well as the constantly changing job market. The Center serves as a place where students, alumni, employers, and academic programs converge in a variety of programs, opportunities, and services related to career and professional development.

## CAREER SERVICES

The Office of Academic and Career Services assists students and alumni in assessing their skills, interests, and values; exploring career options; preparing for the internship, job or graduate school search process; and implementing career goals. Through individual appointments, workshops and special events, students clarify their academic and career pursuits. The office maintains a website providing students immediate access to resources and to information on academic and career events.

Employ-an-Eagle is an online resource available for students and alumni to use in their internship and job searches. This resource allows students and alumni to search job and internship opportunities as well as post resumes for employer review. Employers use this site to recruit UMW students and alumni for a variety of local, national and international job and internship opportunities.

Throughout the year, students and alumni have the opportunity to prepare for the job/internship/graduate school search process and meet with employers and graduate school recruiters. Career Fairs, held each semester, provide an opportunity for representatives from businesses, government agencies, and non-profit organizations to recruit UMW students and alumni for career opportunities. A Graduate School Fair, held each year, provides the opportunity for students to explore graduate school options. Through the on-campus recruiting program, graduating students have the opportunity to interview with organizations hiring full-time positions. The office also maintains credential files for seniors and alumni.

## SUMMER SESSION

The Summer Session offers numerous opportunities to enrich and accelerate a student's academic program. Additional Summer Session offerings include internships, study abroad courses, courses that satisfy state teacher certification requirements, and some offerings that are only available in the summers. Students attend the summer session for many reasons: to get ahead on their work toward a degree; to catch up by taking a course the student had
been previously unable to take; or to explore an area of personal or career interest. Qualified high school students may apply to attend the Summer Session and may take courses if their application is approved.

## STUDENT OUTCOMES ASSESSMENT

The University has adopted a comprehensive plan for evaluating the impact of its programs and services on its students. Developed in response to guidelines set forth by the State Council of Higher Education for Virginia and the Southern Association of Colleges and Schools, the outcomes assessment program examines the extent to which the University is meeting its intended goals for its students. Assessment results are used to evaluate programs and curricula, not individual students.

Although the data collected are maintained in the institution's computer database, they are not included on official transcripts, nor are the aggregated data used for any purpose other than comparative analysis. The long-range goals of outcomes assessment are to identify and rectify the University's shortcomings and build upon its strengths. Only by examining closely the effects of what it does can the University become a stronger and continuously improving institution.

The University's commitment to assessing its effectiveness necessitates the participation of students, who are required to be involved directly in the evaluation of the various academic major programs as well as the General Education curriculum.

## INTERNATIONAL PROGRAMS AND EDUCATION ABROAD

The University of Mary Washington encourages students to enrich their liberal arts education through academic programs, research endeavors, internships, volunteer opportunities and service learning in other countries. Any currently enrolled student with at least 12 accumulated UMW credits and a 2.0 GPA may make education abroad part of their Mary Washington experience.

A wealth of academic programs are available in a variety of locations for nearly all academic disciplines. Faculty-led programs, based on the expertise and interests of UMW professors, are offered during the summer and over the spring and winter breaks. Students may also enroll in summer, semester and academic year programs approved by the Center for International Education (CIE).

Students exploring the possibility of education abroad work closely with the Center for International Education. Preparations must be made well in advance and include the guidance of CIE as well as the student's academic advisor(s). CIE assists students with program selection and approval, transfer
credit, and other administrative and cultural preparations, and supports them while abroad and upon re-entry to UMW. With careful preparation and planning in conjunction with CIE and the student's academic advisor(s), students may use coursework as well as research endeavors, internships, volunteer opportunities and service learning to fulfill degree and major requirements.

CIE also supports international students, both exchange and degreeseeking, in their adjustment to the academic, cultural and social aspects of living and studying in the United States. Serving as the point of contact with U.S. Citizenship and Immigration Services and the Department of State, CIE provides education and guidance to support compliance with the federal immigration regulations governing international students in the United States.

## UNDERGRADUATE RESEARCH AND RESEARCH GRANT PROGRAM

Faculty are committed to the mutually supportive values of undergraduate teaching and academic research. Seeking to extend those values to its students, UMW has a well-established and nationally-recognized Undergraduate Research Grant Program, whereby collaborative teams of faculty member(s) and students apply for University-funded research project support. This grant program enables undergraduates to work intensively with faculty members on a broad range of research topics, work which in many instances leads to student presentations at state, regional, or national academic conferences. In some instances, undergraduate research grants support student travel for study, observation, and performance related to focused individual projects.

Students engaged in undergraduate research earn credits by registering for individual studies (courses numbered 491 or 492). Every academic discipline offered at the University has such courses available. Students should check with the department in which they are interested in doing an individual study because programs have specific requirements for enrolling in individual study courses.

Another undergraduate research option is the URES 197 course. In this case, the student works on the faculty member's research project and completes research tasks connected with that project as determined by the faculty member. Beginning students are eligible to register for URES 197, and the students who complete URES 197 will likely develop their own individual study project at a later time, thereby building on initial research experiences. Individual studies are most often done by more advanced students (juniors and seniors) who have the necessary background to successfully formulate an individual study project.

## WRITING CENTER

The Writing Center, located on the Fredericksburg campus, is open to all

Mary Washington students. Operating within the Honor Code, the Writing Center offers free tutorial assistance to undergraduate and graduate students, regardless of major or concentration, both for course assignments and for personal writing needs.

The Writing Center works with student writers at every skill level to improve their writing performance. Staffed by a faculty director and welltrained student tutors, the Center provides advice in getting started on papers, developing ideas, achieving unity and coherence, reviewing troublesome parts of papers, learning writing styles such as APA and MLA, understanding and correcting recurring grammatical and punctuation errors, and overcoming writer's block. The Writing Center welcomes students writing research papers, short essays, letters of application, and laboratory reports. The Center also provides access to various writing guides.

## SPEAKING CENTER

The Speaking Center, located on the Fredericksburg campus, supports the Speaking Intensive Program by providing free consultations to students interested in developing oral communication skills. The Center houses a collection of instructional resources (books, handouts, videotapes, and equipment) that address a variety of topics ranging from public speaking anxiety to constructing effective visual aids. Consultants are available to video record practice presentations and to provide feedback.

The Center adheres strictly to the Honor Code: consultants will not compose any portion of a presentation for a student, nor will they do research for a student's presentations. Consultants also are prepared to offer advice on special types of oral communication activities such as speeches, group presentations, debates, or interviews.

## DIGITAL KNOWLEDGE CENTER

The Digital Knowledge Center (DKC) provides UMW students with peer tutoring on digital projects and assignments. Any student at the University can take advantage of the Center's services by scheduling an appointment to work one-one-one or in a group with a student tutor; when a tutor is available, the Center also provides walk-in assistance. Tutorials can cover a wide-range of topics related to common digital systems, technologies, new media, and tools used in courses at UMW. The main cadre of DKC students works out of the Center in the Information and Technology Convergence Center (ITCC) 408. In addition, "deployed" DKC tutors specifically offer tutoring on media editing in the Multimedia Editing Lab in ITCC 116. DKC tutors adhere to the UMW Honor Code in all tutorials. They are available to provide guidance and advice, but they cannot create, produce, or edit work on a student's behalf. In addition to tutoring, the DKC student employees assist with class visits,
running workshops and seminars, and managing the development of online documentation to support various digital tools and systems at UMW.

## INFORMATION TECHNOLOGIES AT THE UNIVERSITY

The University of Mary Washington is making steady progress toward status as a national model in the use of technology in teaching and learning. The divisions of Information Technologies and Teaching and Learning Technologies focus not only on the construction and maintenance of networks and information systems, but on the exploration and deployment of technologies that effectively and efficiently promote a first-rate education.

The University believes that technology helps stimulate creative thinking, enabling students and faculty to take advantage of all that the current worldwide information environment has to offer. Technology allows students to view, learn, assemble, and personalize information and resources from diverse sources, and enables faculty collaboration with colleagues without geographic limitations. In every discipline throughout the University, courses make use of technology to help actively engage students in the learning process.

Student Computing Needs. As a UMW student, a computer is essential to a successful academic career. While UMW does not require our students to bring a computer to campus, it is strongly recommend to facilitate access to the many resources and services available online. For suggested computer specifications, and what to expect in the UMW computing environment, please visit technology.umw.edu/new/students. Numerous computer labs are available on the Fredericksburg and Stafford campuses, equipped with both PC and Macintosh computers and specialized software. Printing is available in labs and can be charged to the EagleOne card.

Wireless network access is available in all academic and administrative buildings and many outdoor areas along campus walk. Residence hall rooms are equipped with both wired and wireless Internet access for each occupant through subscription ResNet service. University network resources, such as registration, class schedules, course materials, library offerings, and email, may be accessed online.

IT Help Desk. Technical support for the entire UMW community is provided by the IT Help Desk. If you have a technical question or issue, contact them at 540-654-2255, email at helpdesk@umw.edu, online at technology. umw.edu/helpdesk, or visit room 112 in the Information and Technology Convergence Center. Additional online documentation addressing most common IT issues is available at technology.umw.edu/info. The Help Desk does not repair student owned computers, but will assist in attempting to diagnose issues with software or hardware.

## ACADEMIC ADVISING

All undeclared B.A./B.S. students are advised by the Office of Academic and Career Services. When students choose their major fields they are assigned advisors from the major department. B.A./B.S. students may also consult the Office of Academic and Career Services on a variety of academic situations. BLS students may contact the BLS office. Assistance in developing academic skills and in choosing a major field is also offered by this office.

BLS Advising for incoming BLS students is provided by the BLS advisor and/or director. After declaring a major BLS students will be assigned a major advisor but also continue to be advised in the BLS Office. To change advisors, students should contact the BLS Office.

Major Advising is provided by faculty in the student's major department. Major advisors are assigned by the department chair. Students will have a major advisor for each declared major. Students will plan their course work with their major advisor so that they will be able to meet all graduation requirements in a timely manner. To change the major advisor, B.A./B.S. students should contact the chair of the major department. BLS students should contact advisors in their respective areas for a change in major.

Non-degree students are not assigned to an advisor.
International students are also advised by the Office of Academic and Career Services.

## TUTORING

The Office of Academic and Career Services offers free tutorial services to degree-seeking University of Mary Washington students in need of academic assistance. Although tutors are available in a variety of subjects, tutors are not available for every course offered at the University of Mary Washington. Students are encouraged to seek help early in the semester if they feel that they will have difficulty in a course. Students who need assistance should contact the Office of Academic and Career Services or their academic advisor on the Stafford campus.

## SPECIALIZED ADVISORS

Accounting. Students interested in accounting may focus their study in this area through electives in accounting. The accounting advisors help students select courses that meet their individual needs and interests, as well as develop the communication and critical reasoning skills necessary in today's accounting profession. Courses offered at Mary Washington provide students with an opportunity to prepare for the uniform examinations required to obtain the designation of certified public accountant (CPA), certified management accountant (CMA), and certified internal auditor (CIA).

Health Sciences. The health sciences constitute a variety of professions providing health care. The basic liberal arts and science courses offered at Mary

Washington prepare students for entering nursing, physical therapy, dental hygiene, medical technology, occupational therapy, ophthalmic technology, optometry, physician assistant, and pharmacy programs. During their first year students must give careful attention to the professional school admission requirements, which are available on the respective school websites. The PrePhysical/Occupational Therapy and Allied Health Advisors in the Department of Biological Sciences are available to help students select courses that meet these requirements, and prepare for the relevant admission examination. Admission to professional institutions is, of course, very competitive, and depends on academic performance and scores on qualifying examinations.

Medical. Pre-medicine, pre-dentistry and pre-veterinary medicine are career paths, not majors. Students in pursuit of one of these clinical careers may select any of the major programs at the University. Although most premedical, pre-dental, and pre-veterinary students major in one of the sciences, students can easily major in one of the humanities or social sciences and complete their pre-medical courses as electives.

The pre-medical/pre-dental advisor provides academic guidance for the pre-clinical curriculum of the pre-medical and pre-dental students, and students thinking about pursuing one of these careers should contact the pre-medical advisor for an advising appointment. The advisor also heads the Pre-medical Advisory Board, a committee charged with the preparation of an institutional recommendation for each student to be sent to the medical and dental schools.

The pre-veterinary medicine advisor provides academic guidance for students interested in veterinary medicine. These students should contact the pre-vet advisor for an advising appointment.

Law. The pre-law advising system provides guidelines for students interested in entering law school. There is no prescribed "pre-law curriculum," and students considering a legal career may focus their studies in any academic major. Students, however, are encouraged to enroll in courses that develop written and oral communication as well as critical reasoning. The pre-law advisor helps students to select courses that meet their individual needs, foster skills necessary to the legal profession, and prepare for the Law School Admissions Test (LSAT).

Teacher Education. The Teacher Education Program is approved by the Virginia State Department of Education. Students who complete an approved program qualify for licensure/certification in all the states with which Virginia has reciprocity agreements. Students major in an academic discipline and take professional education courses as electives. They have advisors both in their major discipline and in the University's College of Education.

## OFFICE OF DISABILITY RESOURCES

The Office of Disability Resources (ODR) coordinates reasonable and appropriate accommodations for qualified students with disabilities. These
accommodations are based on individual student profiles and may include - but are not limited to - extended time on tests, note-taking assistance, accessible dorm rooms, sign language interpreters, electronic texts, and distraction-reduced testing sites.

In order to receive services, students must provide professional documentation of a substantially limiting condition and discuss appropriate accommodations with the ODR. Documentation guidelines for specific disabilities may be found on the Disability Resources website at academics. umw.edu/disability/ or by requesting it from the office at 540/654-1266. The ODR verifies the disability, determines reasonable accommodations in collaboration with the student, and acts as a liaison with students, faculty, and administration as needed on issues relating to services or accommodations.

## TESTING

College Level Examination Program (CLEP) tests are available in computer-based formats and may be scheduled individually through local universities. Different programs at the University have varying regulations about the acceptance of CLEP test scores. Students with questions should go to the Registrar's website: academics.umw.edu/registrar.

The University's National Testing program provides a quality testing environment for the hundreds of teachers, high school students, and graduate school applicants who live in the Fredericksburg area. On scheduled Saturdays throughout the year, the PRAXIS Series, the Graduate Record Exam (GRE) Subject Tests, the ACT, and the Law School Admission Test (LSAT) are given on the University's Fredericksburg campus.

To register for a national exam, candidates must contact the national office of the exam they plan to take. For more information about these tests and to register, visit these websites: www.ets.org/praxis for PRAXIS; www.gre.org for the GRE; www.act.org for the ACT; or www.lsac.org for the LSAT. Testing announcements, as needed, are posted on the UMW website at www.umw.edu/nationaltesting.

The Graduate Management Admission Test (GMAT) is scheduled individually and is only offered at various computer-based testing (CBT) centers throughout the country. Students interested in taking the GMAT should consult the GMAT Bulletin or go to www.mba.com/mba/TaketheGMAT.

## CENTER FOR ECONOMIC EDUCATION

The UMW Center for Economic Education was established in 2011 as part of the Virginia Council on Economic Education (VCEE). The VCEE works in partnership with colleges and universities in the Commonwealth of Virginia through a statewide network of university-based centers for economic education. The mission of the UMW Center for Economic Education is to build ongoing partnerships with the region's school divisions and their teachers,
provide professional development workshops for teachers, and provide creative, hands-on lesson plans, curriculum and programs for students. These efforts are with the goal of effectively infusing economic and financial education in grades K-12 to promote economic and financial literacy.

## CENTER FOR HISTORIC PRESERVATION

Established in 1979 through a Commonwealth of Virginia Grant for Excellence, the Center for Historic Preservation has a dual mission, to support the historic preservation program and to encourage preservation activities through public outreach programs. The Center enhances students' opportunities for employment, research, internships, and public involvement in preservation by sponsoring lectures, workshops, and conferences, and by conducting research and service projects in the Fredericksburg region. Preservation organizations, government agencies, and citizens are the beneficiaries of the Center's second charge - the support of preservation activities through public programs and cultural resource management services. Since 1989 the Center annually awards the nationally competitive Historic Preservation Book Prize to the book that a professional jury deems to have made the most significant contribution to the intellectual vitality of historic preservation in America. Through its website, the Center hosts the Virginia Local Preservation Reference Collection and the newly established Historic Buildings of Fredericksburg database.

## CENTER FOR INTERNATIONAL EDUCATION

The mission of the Center for International Education (CIE) is to build an internatiThe mission of the Center for International Education (CIE) is to build an internationally minded UMW community in order to prepare UMW students to be globally competent citizens. The Center values diversity and offers an environment that fosters cross-cultural understanding and international cooperation and engagement through transformational programs and experiences. CIE provides support to students interested in study abroad opportunities and serves the needs of international students.

CIE oversees the numerous Faculty-Led programs abroad and UMW Approved education abroad programs. Faculty-Led Programs are conducted by UMW professors during the breaks from the regular academic calendar (winter and spring breaks) or during summer sessions. Students can study, intern, research or volunteer abroad through UMW's Approved Programs for a summer, semester, or year. Students can plan one program or multiple as an undergraduate and earn academic credit that counts toward graduation requirements.

CIE guides international students, both degree-seeking and exchange, through the process of obtaining their visas and how to maintain status. In addition, CIE organizes and leads an international student orientation held
at the beginning of each semester to help ease the transition to studying and living in the United States.

## CENTER FOR LEADERSHIP AND MEDIA STUDIES

The Center for Leadership and Media Studies supports the study of political leadership and of the mass media's roles in international, national and Virginia politics. In conjunction with the Department of Political Science and International Affairs, the Center's programs are designed to give students a wide range of academic experiences and professional opportunities by conducting public opinion research and by bringing members of the university community into contact with political figures and media practitioners at the international, national, state and local levels.

## CENTER FOR SPATIAL ANALYSIS AND RESEARCH (CESAR)

The Center for Spatial Analysis and Research (CeSAR) at the University of Mary Washington is an interdisciplinary research center focused on education, research, and application development in the field of geographic information science (GISc). The center provides customized educational programs, innovative solutions, and access to students and intellectual capital at UMW.

CeSAR professionals encompass a wide variety of academic disciplines and broader GIS experience. To support its mission, CeSAR provides state-of-the-art technology and facilities. The Center serves as a leader and catalyst for the advancement of geospatial thinking and analysis for academic institutions, private industry, and the public sector.

The Center seeks to raise the visibility of existing activity, to encourage linkages and to stimulate new research and education at UMW in the rapidly developing field of GISc. It accomplishes this mission by serving research, education, and administration with computer infrastructure support; shared hardware resources; distribution of site licensed software; specialized instructional classes and seminars; data development, repository and access; consulting services; programming support; community building; and outreach.

## LEIDECKER CENTER FOR ASIAN STUDIES

The Leidecker Center for Asian Studies supports interdisciplinary study of Asia, drawing on the expertise of faculty from across the campus. The Center sponsors an annual lecture series, seminars, and conferences. In coordination with the resources of the Center for International Education, the Center also promotes academic and cultural exchange as well as awareness of Asia and its place in the world. In addition to promoting the academic study of Asia, the Center for Asian Studies sponsors public workshops allowing direct familiarity with various aspects of Asian cultures. The Leidecker Center for Asian Studies
was established by the College's Board of Visitors in 1998 in honor of Professor Emeritus Kurt Leidecker (1902-1991), a professor of philosophy at Mary Washington College from 1948 until his retirement in 1973 and a specialist in Buddhism, who first developed a program in Asian Studies at Mary Washington College.

## CENTER FOR TEACHING EXCELLENCE AND INNOVATION

Through the Center for Teaching Excellence and Innovation, UMW works to promote and sustain excellence in teaching, explore and develop innovative pedagogy and curriculum, and advance student learning. The Center is more than a place; it is a community of faculty, staff and students passionate about learning, a focal point for conversations about and taking action to enhance teaching and learning. The Center seeks to promote a culture of teaching innovation and teaching excellence through scholarly inquiry. A culture of teaching innovation and excellence goes beyond knowledge of pedagogy and course design. For faculty, a culture of excellence embodies knowledge and the application of best practices to one's teaching. For students, it involves the willingness to open up to the challenges of engagement and genuine learning. Through a variety of means, the Center works to support faculty who are interested in scholarly inquiry and in developing teaching strategies to support meaningful learning, implementing meaningful approaches to student assessment, or exploring emerging academic technologies or other instructional and creative resources.

## DIVISION OF TEACHING AND LEARNING TECHNOLOGIES

The Division of Teaching and Learning Technologies (DTLT) is a service organization that provides faculty support and development opportunities for integrating digital technologies into their teaching, learning, and research at the University. DTLT staff consult with faculty about academic technologies on every scale: from small projects incorporating a single technology into an existing course to an entire course redesign. With the recent addition of the Digital Knowledge Center (DKC), DTLT has started providing peer-tutoring support for students to support them with a wide variety of digital projects during their academic career.DTLT is a hub for the research of new and emerging technologies, best practices in using technology for teaching and learning, and the impacts of technology, more generally, on higher education and the creation and sharing of knowledge. DTLT research informs projects at the University and allows the division to serve as a conduit between faculty and students at UMW and external academic, research, and technical communities which are also engaged in the exploration and innovative use of digital technologies.

## UNIVERSITY GALLERIES

The Ridderhof Martin Gallery is a high-quality art museum facility. It displays traveling exhibitions from museums around the country, bringing to the University the art of the past and present from many cultures. Other exhibitions draw from the permanent collection for themes such as "The Artist Looks at Sister Artists" and "Art and 20th-Century War." The duPont Gallery features painting, drawing, sculpture, photography, ceramics, and textiles by art faculty and students as well as other contemporary artists.

The Galleries' permanent collection of some 6,000 artworks is strongest in mid-20th century art and Asian art. The Galleries also house much of the life's work, as well as the personal papers, of New York surrealist Margaret Sutton and Los Angeles figurative expressionist Phyllis Ridderhof Martin.

Professors in art history and other fields often assign class projects and research in the Galleries. Students study the works on view and in storage, and delve into the computerized records and paper files. Students also participate in cataloging the collection and organizing and installing exhibitions.

## UNIVERSITY aCADEMIC POLICIES AND PROCEDURES

The policies and procedures presented in this Catalog are provided for the convenience of students, faculty, and staff and should not be interpreted as an irrevocable contract. Each student is responsible for familiarizing him/herself with and noting changes in policy or procedures affecting his or her program and adjusting the program accordingly. Final responsibility for enrolling in appropriate courses in the right sequence and for meeting all degree requirements rests with the student. The remainder of this section of the Catalog provides information organized alphabetically on a number of general academic policies and procedures applying to all undergraduate students.

Additional academic policies pertaining to degree requirements and programs of study are provided in the "Courses of Study" section of this Catalog beginning on page 79. The Academic Procedures Directory, found at the UMW Provost's web site, provides additional guidance on the steps one should take when seeking to execute a particular policy outlined in this section of the Catalog (how to go about submitting a Leave of Absence request, for example).

The Student Handbook, issued by the Office of Student Affairs, covers nonacademic policies.

## ACADEMIC HONORS

Recognition of Student Academic Achievement. Student achievement is recognized by the University of Mary Washington in several ways. At the end of each semester, the University publishes The President's List and The Dean's List of Honor Students. Outstanding student achievement is also acknowledged at Commencement with a variety of honors and awards, and other recognitions are presented at annual Convocation ceremonies. In addition, most academic departments sponsor University chapters of national honor societies which recognize student achievement in specific disciplines. These academic discipline honor societies and their criteria for election to membership are published annually in the Student Handbook.

Dean's List and President's List. At the close of a semester's grading
period, each degree-seeking student who has completed at least twelve credits of course work on which grade points can be computed and attained a gradepoint average of 3.50 to 3.99 on that work earns a place on the Dean's List of Honor Students for the semester.

At the close of a semester's grading period, each degree-seeking student who has completed at least twelve credits of course work on which grade points can be computed and attained a grade-point average of 4.00 on that work earns a place on the President's List of Honor Students for the semester.

Academic Distinction. The University recognizes the academic achievement of graduating bachelor's degree students who have earned at least 60 resident credits through the awards of Cum Laude (3.25-3.49 cumulative grade-point average), Magna Cum Laude (3.50-3.74 grade-point average), and Summa Cum Laude (3.75-4.00 grade-point average). The University recognizes the academic achievement of all graduating bachelor's degree students who have earned at least 30 but fewer than 60 resident credits through the awards of With Distinction (3.30-3.74 grade-point average) and With Highest Distinction
(3.75-4.00 grade-point average). Students eligible for one set of awards are ineligible for the other set. These awards are based solely on the student's grade- point average at the University of Mary Washington, and the requisite hours include only those UMW credits for which grade points can be computed.

Departmental Honors. Students may earn graduation with honors in their major subjects. Each department establishes its own requirements for honors projects or theses. All departments require that a student intending to undertake an honors project have a specified minimum grade-point average in the major subject and a minimum grade-point average for all work taken at the University of Mary Washington.

University Honors. Students fulfilling all of the requirements for the University Honors Program (complete a minimum of 6 credits per year of honors work, maintain a cumulative GPA of 3.2 , complete the required
seminar and service project, and participate in required co-curricular events) will earn University Honors.

Colgate W. Darden, Jr. Award. Established in 1960, this award honors Colgate W. Darden, Jr., President of the University of Virginia from 1947 to 1959. It consists of a medal designed by Gaetano Cecere, formerly of the Department of Art, and a cash award. It is presented to the senior having the highest University of Mary Washington grade-point average. To be eligible, a student must have earned at least 94 UMW credits on which grade points can be computed.

Mortar Board. Mortar Board is the national senior honorary recognizing those students who combine outstanding records of scholarship, leadership, and service. Founded as a women's honorary in 1918, it has been open to both men and women since 1976.

Phi Beta Kappa. The oldest and most prestigious of national academic
honor societies, Phi Beta Kappa recognizes the superior achievement of juniors and seniors in the pursuit of a liberal education. With only some 300 approved Phi Beta Kappa chapters nationwide, the installation of the University of Mary Washington's Kappa of Virginia chapter in 1971 attests to the quality of the University as well as of its students, elected to membership by the Phi Beta Kappa members who constitute the present Kappa of Virginia chapter.

## ACADEMIC RECORDS POLICIES

The University maintains an official academic record in the Office of the Registrar for each student. This record contains all completed course work, grades, grade-point averages, and notes on the student's academic
status. Access to academic records is allowed in accordance with the Family Educational Rights and Privacy Act as amended in 1974. Procedures for student access to the academic record are published annually in the Student Handbook.

Directory Information. The University may release "Directory Information" as defined by the University of Mary Washington under the authority of FERPA, unless the student informs the University's Office of the Registrar that all such information should not be released without the student's prior consent. A form is available for this purpose from the Office of the Registrar. If this form is not received in the Office of the Registrar by May 1 preceding the academic year, selected "Directory Information" will appear in the University's telephone directory.
"Directory Information" includes a student's name, campus mailbox, email address, class level, previous institution(s) attended, major fields of study, awards, honors (including Dean's List and President's List), degree(s) conferred (including dates), dates of attendance, past and present participation in officially recognized sports and activities, and physical factors (e.g., height, weight of athletes). A request to withhold "Directory Information" must be made on a form available in the Office of the Registrar.

The request to restrict the release of "Directory Information" remains in effect until the student notifies the Office of the Registrar, in writing, to
remove the restriction. A restriction on the release of "Directory Information" will remain in effect even if the individual is no longer a student, unless the restriction is removed by written request made to the Office of the Registrar.

Medical and Psychological Services Center records are not included in that category of records open to inspection; however, such records may be personally reviewed by a physician or other appropriate professional of the student's choice.

Confidential records maintained by the Director of Disability Resources are open to inspection with limitations. Students may request a copy of disability documentation which is generated by the office, but may not request
access to the Director's personal notes or test protocols or to information released by private practitioners or by other agencies. Disclosure related to the student's disability is released neither to any faculty member nor to another office on campus without the student's permission. With the student's written permission, disability documentation generated by the Office of Disability Resources may be released to any specified persons and agencies.

Custodians of educational records are not required to give access to financial records of parents or any information contained therein, nor are they required to give access to confidential letters and statements of recommendation that were placed in the educational records prior to January 1,1975 , or to which the student has waived the right of access.
"Directory Information" may not be provided to any individual, company or entity for commercial purposes unless the release of this information is specifically authorized by the student or approved in writing by the Office of the Registrar.

Education Records. Educational records are those records directly related to a student and maintained by the institution or by a party acting for the institution.

The permanent academic record, which is maintained by the Registrar, contains all completed course work, grades, grade-point average, and notes on the student's academic status. The student's application file, which contains the student's application and accompanying transcripts, is maintained for five years following the student's last date of enrollment.

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. Online learning creates a record of student activity; therefore, it is subject to FERPA privacy rights unlike verbal exchanges in a physical classroom. Distance education courses are covered by to FERPA in the same manner as any other courses.

Students have the right to inspect and review education records within 45 days of the day the University receives a request for access. Students do not have the right to copies of those records. Students should submit to the Registrar written requests that identify the record(s) they wish to inspect. The Registrar or appropriate University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the Registrar shall advise the student of the correct official to whom the request should be addressed.

Students have the right to request the amendment of the student's education records that the student believes are inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested, the University will notify the student of the decision and advise the student of
his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

Students have the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA are:

Family Policy Compliance Office
U.S. Department of Education

400 Maryland Avenue, SW
Washington, DC 20202-4605
The University will not permit access to, or the release of, educational records without the consent of the student or eligible parent or legal guardian to anyone other than the following:

1. University officials who, in order to perform their duties properly, must have access to official records;
2. Officials pursuant to their statutory responsibilities (the Comptroller General of the United States, the Secretary of Education, the Commissioner, the Director of the National Institute of Education or the Assistant Secretary for Education, and/or state educational authorities);
3. Any party legitimately connected with a student's application for, or receipt of, financial aid;
4. State and local officials or authorities to which such information is specifically required to be reported or disclosed pursuant to state statute adopted prior to November 19, 1974;
5. Accrediting organizations, for the purpose of carrying out their accrediting functions;
6. Parents of dependent students as defined in section 152 of the Internal Revenue Code of 1954;
7. Parties acting under authority of a judicial order or pursuant to any lawfully issued subpoena, upon condition that the students are notified of all such orders or subpoenas in advance of the compliance therewith by the educational institution;
8. Appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons.

## ATTENDANCE AND CLASS ABSENCES

Class Attendance. A primary responsibility of students is class attendance.
Learning is an experience which requires active participation, and the University expects participation of students in all their scheduled classes be they lectures, online collaborations, laboratories, seminars, studios, field trips or other types of activities. It is understood that occasional absences are unavoidable, but the student is responsible for his or her decision to miss a particular class meeting. In deciding to miss a class, a student must be aware that he or she is accountable, nonetheless, for any test or quiz and all assignments, material covered, and announcements made in that class. Faculty are entirely at their discretion about whether or not to allow a student to make up missed assignments. Furthermore, class participation itself is an appropriate criterion for grading and a student's failure to participate can be expected to affect his or her grade in the course. Failure to drop or withdraw from a course that the student is not attending may result in a final grade of F .

Requests by students whose religious observance precludes class participation on specific days to reschedule graded work will be honored. Graded work includes final examinations, scheduled tests, graded written
assignments, graded laboratory projects, and graded oral assignments. Alternative dates will be set by consulting with the instructor or instructors and, if necessary, through consultation with the Office of Academic
and Career Services. It is the student's responsibility to make alternative arrangements as early as possible.

Jury duty. UMW students may be summoned to serve as trial jurors. Jury duty is a legal obligation and those who fail to respond to a summons are subject to criminal prosecution. The University supports jury service as an important civic duty and community responsibility. Students who will need to miss class in order to fulfill their jury service obligation should promptly notify all instructors, provide a copy of the summons as documentation of the absence (if requested by the instructor), and make arrangements to complete any missed work. Absences from class because of jury duty service will not be penalized. Students should contact the Office of Academic and Career Services if they have any questions or if they need assistance in making arrangements for missed class time due to jury duty service.

## AUDITING A CLASS

A degree-seeking student may audit a class (sit in for no credit), by completing the Auditor's Registration Form in the Office of the Registrar the day after the end of the Add Period. Auditing is permitted, by written permission of the instructor, in non-restricted courses in which space is available. Non-degree students may also audit a course, provided that the instructor approves, space is available in the class, and the course is nonrestricted. Full-time students who audit a course that cause their semester load to exceed 18 credits must pay the audit fee.

## CLASS STANDING AND ACADEMIC PROGRESS

If a B.A./B.S. student intends to graduate in eight semesters, normal progress toward a degree is a minimum of 28 credits completed by the end of the second semester of the freshman year and 15 to 18 credits completed during each of the remaining six semesters for a total of 120 credits. Under this definition of normal progress, students are classified as follows:

| Freshmen | 1 to 29 credits |
| :--- | :--- |
| Sophomores | 30 to 59 credits |
| Juniors | 60 to 89 credits |
| Seniors | 90 or more credits |

Students who wish to accelerate their progress and graduate in fewer than eight semesters must consistently take 17 or 18 credits each semester and attend summer sessions. In this way, a student can graduate in three calendar years.

## COMMENCEMENT

The date for the degree awarded is the conclusion of the summer, fall or spring terms in which all the degree requirements were completed. The student is cleared for the degree award and the degree is posted on the official transcript at the conclusion of the summer, fall or spring terms in which all degree requirements were completed and all other obligations to the university have been met. Students submit degree applications during the second semester of the junior year. In extraordinary situations, a student who requires no more than one course for graduation and plans to complete the degree requirement following commencement may petition the Office of the Registrar for special consideration to participate in the commencement ceremony.

## CONTINUING AT THE UNIVERSITY

Non-attendance does not cancel registration and may result in failing grades and financial obligations to the University. Registration must be cancelled prior to the first day of class in order to avoid these consequences. Students planning to discontinue attendance at the University should follow
the procedures outlined under the "Leave of Absence" or "Withdrawing from the University" policies, as appropriate.

## COURSE CHANGES

Course Changes Initiated by Students. Each student is responsible for his or her course schedule and any changes in it, such as adding, dropping, or withdrawing. Failure to drop or withdraw from a course that the student is not attending may result in a final grade of F . All actions must adhere to the deadlines. Each student should print and inspect a schedule of his or her classes after registration and each time a change (drop, add, etc.) is made. Any discrepancy should be addressed immediately by making the appropriate change and verifying it by printing the correction or by contacting the Office of the Registrar. No credit is allowed for a course in which the student is not officially registered and which is not listed on the student's printed schedule.

Students may add courses to their schedule by enrolling through Banner.
Banner displays all courses for which a student is enrolled. Credit can be awarded only for those courses in which the student is enrolled. The end of the first week of classes is the last day to add a full-semester course.

Students may drop courses from their schedule. Courses dropped from a student's schedule will not be displayed on the student's schedule or transcript, or on the instructor's course roster. The end of the third week of classes is the last day to drop a course.

After the third week of the semester, a student may withdraw from a course by completing the required course withdrawal form (available from the Office of the Registrar). Courses from which a student has withdrawn will be displayed on the student's record with a final grade of W. This has no effect on a student's GPA calculation and does not satisfy any graduation requirements. The last day to withdraw from a semester-long course is the Friday of the 9th week of the semester. The last day to withdraw from an eight-week session course offered with the fall or spring semester is indicated on the Academic Calendar, included in this Catalog.

NOTE: Discontinuing attendance in a class does not constitute dropping the course. A Drop (or Add) is not official until the student successfully completes and verifies the action in Banner or completes the appropriate form and delivers it, in person, to the Office of the Registrar on either campus. No student should assume that an instructor has dropped him/her from a course. Each student is responsible for seeing that his or her schedule is accurate in Banner.

During the Add/Drop Periods, students may make changes in their course schedules without written permission from their advisors. After the first three weeks of the semester, withdrawal from a course requires written approval of both the advisor and the course instructor (provided on the Course Withdrawal form). Students living in campus housing are expected to maintain a course load of at least 12 credits.

Course Changes Initiated by Instructors. An instructor may drop a student from a class roster if the student fails to come to the first class meeting of any class or does not attend the first class meeting after the student adds the class. Students with a legitimate reason for missing the first class meeting should make prior arrangements with the instructor. Since instructors are not required to drop students in this manner, no student should assume that he or she has been dropped from a class for non-attendance. If a student does not plan to attend a class, he or she should follow regular drop procedures.

If a student has not logged into a majority online course during the first three days after the start of the semester or term, the instructor may drop this student from the course. Since instructors are not required to drop students in this manner, no student should assume that he or she has been dropped from a class for non-attendance. If a student does not plan to attend a class, he or she should follow regular drop procedures.

## CREDIT THROUGH PLACEMENT AND EXAMINATION

Advanced Placement (AP). Students entering from high school may apply
for college credit by taking examinations given by the Advanced Placement Program of the College Entrance Examination Board. Students who have taken any of these examinations should arrange to have the results forwarded to the University by the College Board. As determined by the University, credits will be awarded for AP scores of 3 or higher and awarded credits may count toward the major program or general education requirements. The University will determine satisfactory AP scores and how they will be applied to the degree.

Cambridge A-Level Examinations. Students may earn course credit for satisfactory scores, as determined by the University on the Cambridge A-Level examinations. Credits awarded may count toward the major program or general education requirements. Students who have taken these exams should forward their scores to the University. Contact the Office of the Registrar for additional information.

Credit Through Standardized Testing (CLEP and DANTES). Students may earn college credit through College Level Examination Placement (CLEP) or Defense Activity for Non-Tradition Education Support (DANTES). Examinations must have been taken before the student has been granted B.A./B.S. degree-seeking status at UMW. B.A./B.S. students cannot receive CLEP credit for exams taken after matriculation at UMW. BLS and BPS degree candidates are eligible for CLEP or DANTES credit any time before earning 30 credits in alternative credit testing and before earning 90 transfer credits toward the degree. CLEP and DANTES are designed for the student who has gained knowledge in a subject area through means other than formal academic course work. The University grants CLEP credit for selected Subject Examinations if predetermined satisfactory scores are achieved. B.A./B.S credit is not granted for any of the General Examinations. The BLS and BPS
programs award credit for all the General Examinations and appropriate Subject Examinations when the scores earned are in the 50th percentile or higher (the TOTAL score must be reflected as 50 or higher). A maximum of 30 credits can be earned by examination toward a BLS or BPS degree. Credits earned through CLEP or DANTES can count toward the major program or general education requirements, or can be scored as elective credits. CLEP and DANTES credits do not fulfill Writing or Speaking Intensive requirements.

International Baccalaureate (IB). The University awards academic credit for test scores of five (5) or higher on individual higher-level IB courses and also for the completion of the IB Diploma. A minimum of 15 credits will be awarded for the completed IB Diploma. If the IB Diploma student's higherlevel test score results do not result in at least 15 credits, the difference will
be awarded as elective credit (to add up to a minimum of 15 credits). Credit is awarded at the time of matriculation and is based on the scores earned on the IB examinations. All credit awarded will be recorded on the student's permanent record and will be included in the credit total toward degree requirements. Credit will be awarded for 100 -and 200 -level course work (upper level credit can be awarded in some language areas). Credits awarded may count toward the major program or general education requirements. No credit will be awarded for IB examinations taken on the Standard Level. Questions regarding IB credit equivalencies should be directed to the Office of the Registrar.

Guidelines Covering the Application and/or Deletion of Transfer
Credits. The following provisions apply to all forms of examination-based transfer credit (AP, Cambridge, IB, CLEP, DANTES).

1. Transfer credits will be forfeited and removed from the record if the equivalent course or courses are completed at UMW or another institution (and transferred into UMW for credit).
2. Transfer credits are counted as completed credits toward graduation, and thus affect all decisions regarding probation, suspension, and dismissal.
3. A student may request the permanent deletion of transfer credits from his or her record at any time except after academic dismissal.

Credit By Examination at UMW. An enrolled, degree-seeking student may request a special examination in any course offered by an academic department other than a seminar, individual study, studio, or laboratory courses. The department must agree that an examination is appropriate in the requested course. If the student passes the examination, the course and a grade of CR will be recorded on the student's permanent record to indicate credits earned. No quality points are awarded. If a student fails the examination, a grade of CI will be recorded. The student must then enroll in the course in the next semester in which it is offered. The student's earned grade and attendant
quality points will replace the grade of CI. Should the student not enroll, the CI is converted to a grade of F . There is a charge for each examination.

## FINAL EXAMINATIONS

Final Examination Policy. All final examinations or alternative assessments given in lieu of final examinations must be given during the regularly scheduled examination period at the end of each semester or 8 -week session at the time listed for the course in the officially announced schedule.

Examinations are scheduled for specific periods and should not interfere with subsequent examinations. Take-home examinations may be distributed as early as the last day of classes and cannot be due before the regularly scheduled examination period for that class. In accordance with Honor Council procedures, a student is required to pledge to disclose neither the contents nor the form of any examination until after the conclusion of the examination period. A student who has not taken a required final examination has not completed the course requirements and therefore fails the course.

Rescheduling Final Examinations. In instances of multiple sections of the same course taught by the same instructor (including lab periods), it is permissible, at the discretion of the instructor, to allow students to take final exams in either scheduled exam period. It is the student's responsibility to make him/herself aware of the final examination schedule and to make arrangements to be available to take the examination at the scheduled time. Any adjustments to a student's examination schedule MUST be made by the FRIDAY PRECEDING THE LAST WEEK OF CLASSES.

Students who have more than two examinations scheduled within a 24-hour period may reschedule until there are only two exams within that 24 -hour period. The student shall decide which examination would best be moved and then should consult with the instructor who teaches that course. If the instructor deems it inappropriate because of the nature of the examination to reschedule the examination, the student should then approach the other two instructors. If none of the instructors is able to reschedule the examination given in the course, then the student will bring the dilemma to the attention of the Office of Academic and Career Services who will then contact the instructors to work out a solution. It is the responsibility of the student to start this process early enough in the semester so that it will be completed by the Friday preceding the last week of classes.

Examination Make-up Dates. The make-up date will be decided by mutual agreement of the instructor and the student. Alternate examination dates will be set by consulting with the instructor or instructors and, if necessary, through consultation with the Office of Academic and Career Services. In cases where an examination conflicts with a student's religious observances, students should follow the procedures with respect to religious holiday observances as noted in the earlier section titled "Class Attendance."

## FULL-TIME STUDENT

To be considered full-time, an undergraduate student must be enrolled in 12 or more credits for the semester. The U.S. Department of Education and the Department of Veterans Affairs classifies a student enrolled in 9 to 11 credits as three-fourths time. Six to eight credits is considered half- time, and five credits or fewer is less than half-time.

If a student intends to graduate in eight semesters, normal progress towards a degree is as follows: A minimum of 28 credits completed in the first two semesters and 15 to 18 credits completed during each of the remaining six semesters, for a total of 120 credits for B.A./B.S./BLS (see Class Standing and Academic Progress). BPS students may consult with the Assistant Dean of Advising Services (Stafford Campus) regarding academic progress toward graduation.

A student who starts with more than 12 credits in a semester may drop below a 12 -credit course load; however, a residential student may not live in a residence hall while carrying fewer than 12 credits unless special written permission has been obtained. Students receiving financial aid should consult the Office of Financial Aid before dropping below a full course load. Students participating in NCAA intercollegiate sports must maintain a minimum 12credit course load unless they have been granted a special written exemption from the Director of Athletics.

Also see the section on overload.

## GRADING AND GRADE REPORTS

Grades. Academic performance in any course is rated according to the following system:

A $\quad 4.00$ quality points - Excellent
A- $\quad 3.70$ quality points
B+ 3.30 quality points
B $\quad 3.00$ quality points - Commendable
B- $\quad 2.70$ quality points
C+ 2.30 quality points
C $\quad 2.00$ quality points - Acceptable
C- $\quad 1.70$ quality points
D+ 1.30 quality points
D $\quad 1.00$ quality points - Marginal
F $\quad 0.00$ quality points - Failure
The following grades carry 0.00 quality points:
PA Pass in a Pass/Fail Class
FA Failure in a Pass/Fail Class
SA Satisfactory
UN Unsatisfactory

| W | Course Withdrawal |
| :--- | :--- |
| I | Incomplete |
| G | Delayed Grade |
| CI | Test Incomplete (Failed Credit - by-Examination) |
| CR | Credit-by-Examination |
| NG | Audit |
| NC | No Credit |
| ZC | Zero Credit |

Also see the sections on incomplete grades, pass/fail grades, satisfactory/ unsatisfactory grades, and repeating courses.

Grade-Point Average. Grade-point averages are computed only on courses taken at the University of Mary Washington. Each grade, "A" through "D" carries a numeric quality-point value which, when multiplied by the number
of course credits, produces the number of quality points for the course. The overall cumulative grade-point average (GPA) is the product of the total number of quality points divided by the total number of completed UMW graded credits. For example, a three-credit course with a grade of "A" provides 12 quality points ( 3 credits times 4.0 quality points $=12$ quality points); a fourcredit course with a grade of "A-" would yield 14.8 quality points ( 4 credits times 3.7 quality points $=14.8$ quality points). A student who completed 15 graded credits with a total of 45 quality points would have a grade-point average of 3.0. Transfer credits (including AP, IB, Cambridge, ACE, DANTES, and CLEP), credit-by-examination, physical education or 100 -level dance credits, or courses taken for a pass/fail grade for which a pass grade (PA) was earned are not included in the computation of the grade-point average (GPA). However, a failing grade (FA) received in a course taken for a pass/fail grade will be included in this calculation.

Mid-Semester Grade Report. In the middle of each semester, students are notified by the Office of the Registrar if their performance in a course is reported to be unsatisfactory. Although the report is neither entered on a student's permanent record nor sent to parents or guardians, mid-semester unsatisfactory reports are posted in Banner, and sent to advisors. Because a " U " is a warning that significant improvement is needed, the student should consult instructors, advisors, or the Office of Academic and Career Services, for assistance.

Final Grade Report. Final grade reports are made available to students at the end of each semester. According to the Family Educational Rights and Privacy Act of 1974 as amended, a federal law, a student's educational record may not be disclosed to anyone outside the University, including parents, without the student's written permission.

## GRADE APPEALS (ACADEMIC DISPUTES)

If there is a dispute between a student and a faculty member concerning a decision of the faculty member, every effort should be made by them to resolve the matter. If the disagreement cannot be resolved, the student may request a review of this decision no later than the end of the following semester, recognizing that the burden of proof is on the student. In such cases, the following procedure is to be followed:

The student will submit a written statement of the matter under dispute, with any supporting material, to the chairperson of the department of the faculty member concerned (or to the College Dean, if the dispute is with the chairperson), with a copy sent to the faculty member.

1. Within seven (7) days, the chairperson will review the dispute, consulting with the faculty member and student concerned, with other department members as appropriate, and will attempt to settle the dispute. If agreement is reached at this level, the process ends.
2. If either party does not accept the recommendation of the chairperson, the chairperson will forward all material including his or her recommendation to the college dean.
3. The college dean will review the material submitted and will determine whether or not further consideration of the matter would be fruitful. If the decision is that additional consideration would not be fruitful, the college dean will render a final decision. If further consideration is needed, the matter will be referred to an academic review board to act as a conciliator between the student and the faculty member.
4. If the college dean determines that further consideration is needed, the matter will be referred to an academic review board. The dean of the college in which the faculty member is housed will determine the makeup of the academic review board.
5. The academic review board will hear the evidence of both the student and the faculty member on the matter and, within two weeks of being convened, communicate its recommendation to the college dean with copies to the student, faculty member and chairperson involved.
6. The college dean will then render a decision, which will be final.
7. Either party may appeal the dean's decision on procedural grounds only by submitting, within seven (7) days, a written appeal to the Provost outlining the specific procedural irregularities being alleged to have occurred during the review of the academic dispute. The Provost will determine whether or not a procedural review is warranted, who should be requested to undertake that review, and the timeline for completing the procedural review and reporting to the Provost. The appeal process is completed with the Provost's decision.
8. If a student believes the faculty member has committed a breach of professional ethics, this concern should be conveyed in writing to the chairperson or to the college dean. If the concern involves the college dean, the matter should be conveyed in writing to the Provost.

## INCOMPLETE GRADE

Incomplete grades are issued on a case-by-case basis when students cannot complete the assigned work or final examination for a particular course due to unforeseen circumstances, e.g., illness, natural disaster, or family catastrophe. Supporting documentation may be required. A grade of I is issued in lieu of an actual grade for the course. To secure permission for an incomplete grade, the student and faculty member must communicate in writing (such as an email), clearly stating the reason for the incomplete, the work to be completed, and the due date. If appropriate, students must drop any subsequent course for which the incomplete course is a prerequisite. Students must complete the course work by the specified contract date which will be no later than the end of the following semester, whether enrolled in University course work or not. A grade of F will be applied automatically to the course after the completion deadline has passed if the student fails to complete the work or the faculty member submits no other grade.

As soon as the emergency is over, the student should attempt to make up the Incomplete by working directly with the instructor. If the work for the course cannot be completed in this way, the Office of Academic and Career Services will by appointment, administer examinations and/or receive student papers so that the work can be completed as expeditiously as possible. If the course is of such a nature that it cannot be completed until the opening of the next semester (for instance, if the work requires laboratory facilities or library materials available only on campus), the student may use the first 4 (four) weeks of the next semester for completion of his or her incomplete coursework. Within two weeks after receiving the work or by the last day of classes for the semester, the instructor must file a Removal of Incomplete form with the Office of the Registrar and assign a permanent grade for the student's performance in the course. If these conditions are not met, the grade will be changed to an F .

## INTERNSHIPS

No more than six internship credits may count toward the minimum number of credits required in a major. No more than twelve credits in academic internship experiences may be credited toward the credits required for graduation. Internship credit is based on the work assignment and time commitment. The time commitment alone does not determine the number of credit hours awarded. Each credit hour of internship requires 3 hours of work at the internship site per week. To be approved for academic credit, the internship experience must be structured, supervised, and an Internship

Contract must be submitted to and approved by the Office of Academic and Career Services following the requirements outlined on their Internship Policies web page.

To be eligible for internship credit, the student must (a) be a degree-seeking student at UMW, (b) have at least 12 hours of credit earned at UMW, and (c) have a cumulative G.P.A. of 2.0 or better at the start of the semester in which the internship occurs.

In certain circumstances, internships may be done at an administrative office on campus (but not in an academic department). On-campus internships require explicit approval. Students desiring to do an internship with an administrative office on-campus must submit (with the internship contract) a letter explaining why the experience cannot be obtained off campus. The on-campus internship supervisor must submit a letter explaining the internship duties and why an on campus internship is appropriate. Additional details are provided at the Internship Policies web page.

## LEAVE OF ABSENCE

Students who will not be attending for a semester, but who intend to return after an absence, must file the appropriate request for a leave of absence.

Leave of Absence. Any degree-seeking student who interrupts the pursuit of the degree must request an official Leave of Absence by submitting the appropriate form prior to the beginning of the first semester of absence. A student who drops all courses prior to the drop deadline must apply for a Leave of Absence. A Leave of Absence may be granted for a maximum of two consecutive semesters. Students on Leave and those who re-enroll within one semester after an approved Leave of Absence (or two semesters in the case of BPS students) will be permitted to complete the degree program as originally begun. Those who interrupt the pursuit of the degree for any reason other than approved Leave of Absence or academic suspension will be required to comply with any changes in academic regulations and degree requirements made during their absence of three or more consecutive semesters. They will be required to complete the general education and major program requirements in effect at the time of re-enrollment at UMW.

There are three types of leave: (1) Personal Leave - for students who do not plan to take courses for one or two semesters for any reason (health, finances, etc.); (2) Study Leave - for students who plan to take pre-approved courses at another college or university in the United States; and (3) Study Abroad Leave - for students who plan to take courses in another country in a program preapproved by the Center for International Education.

For a Personal Leave, B.A./B.S./BPS students must submit a Request for Personal Leave of Absence form to the Office of the Registrar. BLS students submit the form to the BLS Office.

For a Study Leave, students must submit a Request for Study Leave of

Absence form to the Office of the Registrar. Study leave will be granted to any qualified student who plans to enroll in a program, which has been fully approved by UMW in advance. After a student has chosen a program or school, applied and been accepted, he or she works with his or her major advisor to develop the most appropriate selection of courses for the semester or year. The student then obtains the appropriate transfer permission form from the Office of the Registrar, secures written approval from his or her major advisor for any major program courses, and submits this form to the Office of the Registrar for final course approval. This process must be completed prior to enrollment in any study leave course work or the course(s) will not be transferred to UMW. A BLS student must seek permission from the BLS Office and complete appropriate paperwork prior to taking a Study Leave. A BPS student must seek permission from the Assistant Dean of Advising Services on the Stafford Campus.

For a Study Abroad Leave, the student must register to study abroad for a summer, semester or full year, and contact the Center for International Education to complete the necessary paperwork prior to studying abroad.

## NON-DEGREE STUDENT

Any student who has not been officially admitted into one of the University's degree programs is a non-degree student. Non-degree students are governed by the same academic regulations as degree-seeking students. Nondegree students may register for as many as 11 credits per semester and may not register for individual study, research, or internship courses.

## OVERLOAD

Without special permission, a continuing student in good standing may take no more than 18 credits. Permission for an overload is given only on the basis of academic performance, never simply to provide for acceleration toward the degree. Students with a GPA of 3.00 for the most recent semester at UMW are eligible for an overload to 19 credits. Students with a GPA below a 3.00 or who wish to attempt 20 or more hours will be considered on a case-by-case basis. Students may request an overload by completing a request form in the Office of Academic and Career Services in Lee Hall, on the Fredericksburg campus or the Office of the Registrar on the Stafford campus.

## PASS/FAIL GRADE

A student may take one course each semester, or during a complete summer session, on a pass/fail basis, up to a maximum of eight pass/ fail courses. B.L.S. students may take a maximum of $20 \%$ of courses (electives only) on a pass/fail basis. For such courses a grade of PA (pass) or FA (failure) is recorded; a grade of PA does not affect the grade-point average, but a grade of FA counts the same as an F in a graded course and will lower the grade-point
average. Performance required to "pass" in a pass/fail course is the same as the performance required to "pass" in a graded course - i.e., D or better. Courses taken pass/fail can be used only for elective credits; they cannot be used to fulfill Major Program or General Education Goal requirements (with the exception of the Experiential Learning requirement) or General Education Across-the-Curriculum requirements. Students should be careful about using the pass/fail option before choosing a major. A student may take up to one pass/fail and two satisfactory/unsatisfactory courses in the same semester.

The decision to take a course pass/fail must be made no later than the deadline to withdraw from individual courses. If the decision is not made at registration, the student must go to the Office of the Registrar by the deadline to withdraw from individual courses to change a course from graded to pass/ fail or from pass/fail to graded credit. Before electing to use the pass/fail option, a student should consider its effect on the opportunity to earn academic awards, honors, and distinctions, for these are determined, in part, on the basis of a specified minimum number of graded credits earned, excluding pass/fail and satisfactory/unsatisfactory credits.

## PREREQUISITE AND COREQUISITE

Prerequisite Courses. Prerequisite courses must be taken in the appropriate sequence to count toward graduation. A prerequisite for a course is the required preparation for that course. If course 101 is specified as a prerequisite for course 102 , then course 101 must be successfully completed (passed) before the student takes course 102. Course prerequisites are listed in the course descriptions published in this Catalog, and are also available in the online Schedule of Courses. Students are responsible for checking their courses before registering.

As a general rule, no course may be taken for credit that is a prerequisite for, or introductory to, a course already completed successfully. In rare instances, and in the event of compelling reasons, a student may need to take a course out of sequence (e.g., take a course that is a higher-numbered course before or concurrently taking the lower-numbered, prerequisite course). Students seeking permission to take a course out of sequence MUST obtain the permission of the course instructor and the department chair prior to registration. Permission is noted on the Office of Academic and Career Services General Request Form available in Lee Hall, Room 206. For additional details, contact the Office of Academic and Career Services.

Corequisite Courses. A corequisite is a course to be taken at the same time as another specified course, or courses, as designated by the department. A corequisite course may also be completed before taking the course or courses with which it is paired. If one course in the corequisite pair is completed before the other, the student should call the Office of the Registrar during the registration time to be registered in the remaining corequisite course.

Students in Bachelor of Arts, Bachelor of Science, and Bachelor of Liberal Studies degree programs are expected to make satisfactory academic progress by maintaining a 2.00 overall cumulative UMW GPA, the standard required for graduation. Students who fall below a 2.00 overall cumulative UMW GPA are in academic jeopardy and are subject to these probation, suspension and dismissal policies.

The purpose of probation, suspension and dismissal is to warn students that they are not doing satisfactory work, to stimulate them to improve their performance, or, finally, to serve notice that the institution does not choose to allow them to continue because there is little or no likelihood of their finishing successfully.

Evaluation of academic standing is based on two factors: the number of attempted credits and the minimum overall cumulative GPA. For both fulltime and part-time students, the number of attempted credits is calculated by adding the UMW attempted hours (including UMW graded credits, PA, SA, UN, W and repeated credits) to the AP credit, IB credit, CLEP credit, Cambridge credit, and transfer credit hours. The minimum overall GPA is calculated on UMW GPA credits (Grades of PA, SA, UN and W are not considered in calculating the UMW GPA.)

Probation. A student is placed on probation whenever the student's overall cumulative UMW GPA falls below 2.00 . Students on probation who achieve an overall cumulative UMW GPA of 2.00 or higher at the conclusion of either the fall or spring semester will be removed from probation. Any student previously on probation whose overall cumulative UMW GPA falls again below a 2.00 at the conclusion of either the fall or spring semester will be returned to probation. As appropriate, a notation of the student's probation status is entered on the student's permanent record. A student placed on academic probation is expected to consult with his or her faculty advisor and the Office of Academic and Career Services no later than the first week of the ensuing semester. A student placed on "academic probation" may continue to participate in any extracurricular opportunities offered by the institution except those activities that require a specific GPA threshold.

Suspension/Dismissal. Students who do not make satisfactory progress (please see chart below) while on probation will be suspended/dismissed. No student can be suspended after only one semester at the University; a period of probation of at least one semester duration will always precede suspension/ dismissal action. As appropriate, a notation of the student's suspension/ dismissal status is entered on the student's permanent record. A suspended student may not register for any classes at UMW (fall or spring semester) until his or her term of suspension expires. However, a student under first suspension may enroll in UMW's summer school after consultation with the Office of Academic and Career Services. A student under first suspension may
take up to two courses at another college or university for transfer to UMW but must obtain written approval from Academic and Career Services and the Registrar before registering for classes during the semester of suspension. A dismissed student is ineligible to obtain a degree from UMW or to continue enrollment in courses offered by the University.

The academic records of all students on probation are subject to review for academic suspension/dismissal at the conclusion of the fall and spring semesters. All students on probation must have met the appropriate minimum overall cumulative UMW GPA, based upon their number of credits (including AP, IB, CLEP, Cambridge, and transfer credits as well as all UMW attempted GPA hours). All students on probation who have not achieved the requisite minimum overall cumulative GPA at the conclusion of each fall or spring semester will be suspended/dismissed, according to the terms below:

| Number of <br> Attempted Credits | Minimum Overall <br> Cumulative GPA |
| :---: | :---: |
| $12-30$ | 1.60 |
| $31-45$ | 1.80 |
| $46-60$ | 1.90 |
| $61-122+$ | 2.00 |

FIRST SUSPENSION - One-semester suspension. The student will be ineligible to attend the subsequent semester, but he or she would be eligible to return for the semester following the semester away from the University. However, a suspended student would be eligible to attend UMW's summer school after consultation with the Office of Academic and Career Services. If a suspended student's GPA meets the minimum overall cumulative GPA at the end of the summer session, that student will be automatically reinstated. Students who are on a first suspension at the time of departure may depart on a study abroad course only after being advised by the Office of Academic and Career Services.

SECOND SUSPENSION - Two-semesters suspension. The student will be ineligible to attend the subsequent summer session, fall semester and spring semester; but he or she would be eligible to return for the following summer term and/or fall semester. Students on a second suspension are not eligible to study abroad. Any student placed on suspension may appeal his or her suspension to the Committee on Academic Standing. Students cannot be evaluated for a second suspension until they return from a first suspension as either a full-time or part-time student during the fall or spring semester following the guidelines but not the deadlines in the following section: Reinstatement after suspension.

DISMISSAL - Permanent Suspension. A dismissed student is ineligible to obtain a degree from UMW or to continue enrollment in courses offered by the University.

NOTE: Courses taken at other institutions while a student is on disciplinary or honor suspension from UMW are NOT ACCEPTED by UMW for transfer credit and will not fulfill ANY degree requirement. Prior permission for future transfer course work is automatically revoked when a student is suspended/dismissed for disciplinary or honor reasons.

Reinstatement after Suspension. A student returning from suspension after the end of the spring semester is eligible to take courses during the subsequent summer term. (See READMISSION/REINSTATEMENT, below.)

## READMISSION/REINSTATEMENT

Any UMW B.A./B.S., BLS, or BSN Completion degree-seeking student who remains enrolled each semester, without interruption, is considered a continuing student. The student maintains this status by completing Advance Registration each semester through the Office of the Registrar. Students with cumulative UMW GPA's of at least 2.0 who interrupt their enrollment for only one or two consecutive semesters are still considered degree-seeking students.

Readmission. B.A./B.S., BLS, or BSN Completion students who discontinue attendance for three consecutive semesters or more are no longer considered to be in a degree program at the University. Students who wish to return to study must reapply for admission if their last cumulative GPA was a 2.0 or better and if they were not on an approved Leave of Absence. Students who do not return to study within one semester after the conclusion of their approved Leave of Absence are also no longer considered to be in a degree program at the University. Students may begin the readmission process through the Office of Admissions. If a student's last cumulative GPA was less than 2.00, they must begin the readmission process through the Office of Academic and Career Services.

Students seeking such readmission must submit transcripts of any academic work completed while not in attendance at the University of Mary Washington for evaluation and consideration of transfer credit. Previously earned UMW credits will also be reviewed for possible application to the current curriculum. Further, students who are readmitted must follow the graduation requirements and major requirements of the Catalog in force at the time of their readmission.

An undergraduate student who is seeking readmission to the University may choose to have all University of Mary Washington course work that is at least seven academic years old not counted in the calculation of the GPA by declaring Academic Bankruptcy. A student who chooses this option receives credit for courses in which a grade of at least "C" was earned; the grades for such courses, however, are not included in the computation of the GPA.

The decision to declare Academic Bankruptcy must be made at the time of re-enrollment and can be claimed no more than once in a student's career at the University.

Students who have completed a B.A., B.S., BLS, or BSN degree who are continuing their enrollment to complete a second major or to complete requirements for teacher licensure do not need to reapply for admission. However, students who are resuming attendance after completing one degree to complete a second degree must seek admission to the second degree program through the Office of Admissions.

Reinstatement of Students Returning from Military Service. Students who withdrew from the University as a result of military deployment, mobilizations, or duty changes are entitled to return without having to re-qualify for admission so long as the student (a) returns after a cumulative absence of no more than five years, and (b) notifies the Office of Admissions of the intent to return to the University not later than three (3) years after the completion of the military service obligation. The student must provide the Office of Admissions with a copy of the military orders to substantiate the end of duty date.

## REPEATING A COURSE

Students may repeat certain courses in which their original grades were C-, D+, D, F or FA. Although both the old grade and the new grade will be shown on the permanent record, the grade in the repeated course is the grade that determines the student's grade-point average and the amount of credit earned for the course. No additional credits will be earned for repeating courses for which credits have already been earned (courses in which a grade of C-, D+, or D was recorded).

Note: The University of Mary Washington does not guarantee that courses will be available in future semesters. When a course is no longer offered, another course will not replace the repeated course.

Before registering to repeat a course, the student should verify that he or she is eligible to do so according to the restrictions listed below. Registration software may not block students from registering for courses when not eligible, but it is the student's responsibility to adhere to these guidelines regardless of the technical ability to register. Only courses repeated at UMW can improve the student's grade-point average. If a student repeats and passes (with a grade of C or better) a pre-approved transfer course at another institution that he or she failed at UMW, he or she will receive transfer credits, but the UMW record will still include the credits attempted (and therefore the grade-point average penalty) for the failed UMW course.

## Restrictions on Repeating Courses

1. No course may be repeated more than once.
2. No more than three courses may be repeated in a single semester, with the entire summer session considered a single semester.
3. No more than seven courses altogether may be repeated.
4. No course may be repeated that is prerequisite or introductory to an already successfully completed, higher-level course.

## SATISFACTORY/UNSATISFACTORY GRADE

Physical Education courses and certain dance (DANC) courses are graded as either satisfactory (SA) or unsatisfactory (UN). No more than two credits of physical education (PHYD) courses may be taken in a single semester (or complete summer session). A maximum of 8 credits in physical education (PHYD) courses may be included in the credits required for graduation. A BLS student may take a maximum of 6 PHYD credits toward the degree. A student may not take two sections of the same course in a semester, regardless of level. A student may take up to one pass/fail and two satisfactory/unsatisfactory courses in the same semester.

## TRANSFER CREDIT

Transfer Credit from Other Institutions. The University considers awarding transfer credits from other regionally-accredited institutions on two conditions: (1) the institution's accreditation is recognized in the directory Accredited Institutions of Postsecondary Education published by the American Council on Education (credits from international institutions will be considered on a case-by-case basis), and (2) the credits are for graded courses which are deemed appropriate for a liberal arts and sciences degree at the University of Mary Washington. Regulations governing the consideration of courses for transfer credit vary according to whether the credits are transferred BEFORE or AFTER matriculation.

BEFORE Matriculation. As a rule, transfer credit is given for courses of the same type, on the same level, and under the same guidelines as University of Mary Washington courses. Courses for which transfer credit is awarded must neither overlap nor repeat those that the student takes at the University, and a grade of $\mathrm{C}(2.00)$ or better must be earned. Previously awarded transfer credits will be forfeited and removed from the UMW record if the equivalent course work is later completed at UMW or another university. Approved transfer credits can count toward the major program or general education requirements, or can be used as elective credits.

After an official transcript has been received and evaluated by UMW, a student will be notified of the transfer credit that can be counted toward a University of Mary Washington Bachelor of Arts or Bachelor of Science degree or a Bachelor of Liberal Studies degree. B.A./B.S. students who wish to have their transfer credit award re-evaluated should contact the Office of the Registrar to make a specific re-evaluation request. BLS students should contact the BLS Office.

AFTER Matriculation. B.A./B.S./BLS students at the University of Mary Washington who wish to earn transfer credit at another university (e.g., during summer school) must secure written permission from the Office of the Registrar before registering for the course. Transfer credit will only be awarded for courses completed within the semester for which approval has been granted by the Office of the Registrar. Approved transfer credits can count toward the major program or general education requirements, or can be used as elective credits. A student wishing to apply for transfer credits for courses for the academic major must submit a pre-approval form, signed by the department chair, to the Office of the Registrar. This form is available in the Registrar's Office or online via the Registrar's web page.

The student seeking transfer credit is responsible for seeing that an official transcript, complete with the final grades for requested course work, is received by UMW.

Transfer Credit Deadlines. No UMW credit will be awarded for any transfer work (including all pre-approved transfer work) for which UMW has not received official transcripts by the following deadlines:

- For continuing B.A./B.S. and BLS students, official transcripts for preapproved transfer credit MUST be received by UMW by November 15 for spring and summer courses taken in the same calendar year.
- For continuing B.A./B.S. and BLS students, official transcripts for approved transfer credit MUST be received by UMW by April 15 for fall courses taken in the previous calendar year.
If the official transcript from the other institution is received by UMW by the appropriate deadline, the pre-approved credits on which the student has earned a grade of C (2.00) or better, will be recorded on the student's permanent record at the University of Mary Washington

Transfer credit is not awarded for duplicate courses (courses already taken, either at UMW or another institution). The one exception to this policy for B.A./B.S./BLS students is English 101, Composition. Three hours of transfer credit will be considered Writing Intensive elective credit if two transfer courses are considered equivalent to English 101 or if a student earns a grade in English 101 at UMW after receiving transfer credit for one course equivalent to English 101. There is a limit of six, 100-level English composition credits that can be applied to the graduation requirement of 120 credits.

## Guidelines Covering the Application and/or Deletion of Transfer

Credits. The following provisions apply to transfer courses taken at other institutions.

1. Transfer credits will be forfeited and removed from the record if the equivalent course or courses are completed at UMW or another institution (and transferred into UMW for credit).
2. Transfer credits are counted as completed credits toward graduation,
and thus affect all decisions regarding probation, suspension, and dismissal.
3. A student may request the permanent deletion of transfer credits from his or her record at any time except when he or she is on disciplinary or honor suspension or after academic dismissal.

## WITHDRAWING FROM THE UNIVERSITY

Withdrawal for a term, voluntary. Regardless of the date, students who wish to drop or withdraw from all of their courses are voluntarily withdrawing from study for that term. Ceasing to attend classes does not constitute a withdrawal and may result in failing grades as well as additional charges. Such withdrawals must be completed by the last day of class for the session or term.

If students have received grades in a completed session of the term, they are not eligible to withdraw. In this case, students may drop courses registered for in the upcoming session; however, they are subject to drop policies for the courses, and grades received for courses in completed sessions will be recorded as part of the student's permanent academic record for the term.

Students must complete a withdrawal form and obtain the required approvals. A student who fails to withdraw properly may incur additional charges and may receive failing grades. Students are fully responsible for all outstanding charges on their accounts. Students will not be permitted to return to the University or register for courses until their account is cleared. Students living in the residence halls must vacate their rooms if they withdraw for the term.

Military Activation and Withdrawal from the term. Students who are in military service (active duty, reserves, or National Guard) and will be unable to complete the courses in which they are enrolled because of a military deployment, mobilization, or change in duty assignment may withdraw from all courses as of the effective date on their military orders. Students should contact the Office of the Registrar in order to process the course withdrawals, and a copy of the military orders must be provided as documentation. Students withdrawing in this manner will receive a full refund of all tuition and fees and pro-rated refunds for dining or housing contracts. Textbooks purchased from the UMW Bookstore may be returned for credit in accordance with the UMW textbook return policy. For withdrawals occurring beyond return policy end date, students should bring books to the Bookstore for the best available buyback prices.

Withdrawal from the University. Students who discontinue attendance for three consecutive semesters or more (including a term in which the student withdrew from the University) are no longer considered to be in a degree program at the University and are withdrawn from the University. Students who wish to return to study must reapply for admission following the process described in the section on Readmission/Reinstatement.


## COURSES OF STUDY

Courses numbered below 100 do not carry credit that may be applied to a degree. Those numbered 100 through 199 are ordinarily elementary or introductory. Courses numbered 200 through 299 may assume prior study or competence in the subject, acquired in secondary school or in college. Courses numbered 300 through 498 assume either previous course work or special competence in the field. Courses numbered 499 are internships. Individual study courses offer learning opportunities in areas or subjects not covered by regular courses. Courses numbered 500 through 599 are for graduate students. Courses numbered in the 800s and 900s are non-degree professional development courses at the pre- or post-baccalaureate level. These courses cannot be used toward the completion of degree programs at the University.

No course may be taken for credit that is a prerequisite for, or introductory to, a course already completed successfully. Course prerequisites are listed in the course descriptions published in this Catalog, and are also available in the online Schedule of Courses. Students are responsible for checking their courses against the list before registering.

Graduate Programs. The University of Mary Washington offers several graduate programs. Degrees offered include the Master of Education (M.Ed.), Master of Business Administration (MBA), and Master of Science in Geospatial Analysis. The University maintains a separate catalog for graduate degree programs, and students interested in learning more about these graduate degrees should consult that document.

Students enrolled in the undergraduate Elementary Education program follow a course of study that ultimately leads to a Master of Science in elementary education. Details about that program may be found in the education portion of the "Courses of Study" section of this Catalog.


# COLLEGE OF ARTS AND SCIENCES 

Richard Finkelstein, Dean
Grant R. Woodwell, Associate Dean

## THE UNDERGRADUATE CURRICULUM IN ARTS AND SCIENCES

The University of Mary Washington's undergraduate curriculum represents a distinctive academic experience which prepares graduates to make choices that lead to fulfilling lives as responsible, contributing members of local, national, and global communities.
Three interrelated components make up this experience: General Education, the Major, and Electives.

General Education is the foundation of a liberal arts and sciences education and is designed to cultivate the skills, knowledge, and habits of mind that are essential in every field of study and which enable graduates to make effective decisions as citizens of a rapidly changing, richly diverse, and increasingly interconnected world. The University's General Education requirements introduce students to a variety of learning perspectives and methods of inquiry that combine to foster an appreciation for different ways of viewing, knowing, and engaging the world. General Education facilitates collaborative learning, individual intellectual development, and constitutes the basis for lifelong learning.

The Major develops expertise in a specialized area of study resulting from focused investigation in a particular academic discipline or disciplines (in the case of an interdisciplinary major). Majors are organized areas of inquiry and knowledge with defined learning goals and methodologies. Major requirements complement, reinforce, and extend the objectives of General Education while adding depth of study in course work, individualized learning, and co-curricular experiences.

Electives offer students opportunities to explore personal interests, add variety to one's studies, and advance particular academic, career, or professional goals (such as preparation for law or medical school). Electives also enable the study of an area of knowledge in greater depth through individually selected courses or experiences that build on a Major's formal requirements.

The combination of experiences provided through General Education, the

Major, and Electives enable students to achieve the following learning goals and to emerge fully prepared to contribute to the world beyond the University.

## Learning Goals of the Arts and Sciences Curriculum

- University of Mary Washington graduates should be able to write and speak effectively in a variety of contexts;
- University of Mary Washington undergraduates, regardless of major, should acquire specific knowledge of and appreciation for the problems, methods, and contributions of the fine and performing arts, humanities, social sciences, natural sciences, and mathematics;
- The University of Mary Washington academic experience should be characterized by intellectual rigor, integrity, disciplinary depth, and attention to the individual student;
- The University of Mary Washington academic experience should include diverse learning experiences provided by the entire undergraduate course of study: General Education, the Major, and Electives;
- The University of Mary Washington academic experience should offer students an informed understanding of and engagement with global issues, thereby enabling them to graduate fully prepared to contribute in positive and substantive ways to the complicated and changing world beyond the university.
- The University of Mary Washington academic experience should provide students with classroom-based and other educational opportunities to critically examine issues of identity (such as race, ethnicity, class, gender, sexuality, and nation), including explorations of how they relate to value systems, structured inequality, and cultural and institutional power. In addition to preparing Mary Washington students to contribute thoughtfully to the world beyond the university, a focus on issues of power and inequality is a critical component of the University of Mary Washington's commitment to campus diversity.
- The University of Mary Washington academic experience should ensure that students are in command of the technologies that define not only 21st-century communication but the emerging tools of different disciplines.


## BACHELOR OF ARTS AND BACHELOR OF SCIENCE DEGREES

The choice of major program determines which degree one receives. The Bachelor of Arts degree is for majors in Anthropology, Art History, Studio Art, Classics: Classical Archaeology, Classics: Classical Civilization, Classics: Latin, English, English: Creative Writing, French, Geography, German, Historic Preservation, History, International Affairs, Music, Philosophy, Philosophy: Pre-Law Concentration, Political Science, Religion, Sociology, Spanish, and Theatre. The Bachelor of Science degree is for majors in Biology, Business Administration, Chemistry, Computer Science, Economics, Environmental Science and Geology (both the Natural and Social Environmental Science Concentrations), Environmental Science and Geology (Environmental Geology concentration), Environmental Science and Geology (Geology Concentration), Mathematics, Physics, and Psychology.

Both the B.A. and B.S. degrees require 120 credits for completion. Both degrees also require an overall cumulative grade-point average of at least 2.00 (equivalent to a "C" average) on Mary Washington course work, as well as a cumulative grade-point average of at least 2.00 in each major program on Mary Washington course work. The residence requirement is as follows: To be considered a degree candidate, a student must earn at least 30 academic credits at the University of Mary Washington, including at least half the credits required for the major program unless more are required by the major department. Students must also earn at least 15 of the last 21 credits at Mary Washington.

## GENERAL EDUCATION REQUIREMENTS FOR B.A./B.S. DEGREES

General education requirements are designed to advance several educational goals. The requirements involve the development of core skills enabling students to understand, evaluate, articulate, and advance their ideas and the ideas of others. General education courses furthermore prepare students to engage knowledgeably and responsibly with a changing, complicated, and multidimensional world. Through the variety of requirements, students are challenged to explore issues, solve problems, and learn through multiple methodological approaches. In the end, the general education program helps students to develop as individuals and as engaged members of the larger UMW community, and helps to foster the intellectual curiosity that will inspire students to acquire the habits of lifelong learners.

The following general education requirements are in effect for all students who enter the University of Mary Washington seeking a bachelor of arts or bachelors of science degree. No general education course work, except for the Experiential Learning Requirement, may be completed on a Pass/Fail basis. With the exception of courses marked as Writing Intensive or Speaking Intensive (WI
or SI), one course taken fulfills only one general education requirement, even if the class is listed as an option in more than one category. A course that is listed as an option for both Global Inquiry and Human Experience and Society, for example, will be counted as satisfying only one of these categories. But a course that is an option in Global Inquiry and is also marked as Writing Intensive would be counted in both of those categories. It's helpful for students to remember that they have four years to fulfill all graduation requirements, and they should not view the completion of general education requirements and the major as two separate activities. In fact, many of the courses that will satisfy general education requirements are upper-level courses that one might think about taking after selecting a major. In this way, the selected general education courses will connect well with the intended major course of study.

The B.A./B.S. degree general education requirements are as follows. See the list beginning on page 87 for the courses that will meet the various requirements.

First-Year Seminar. One course designated as a first-year seminar. Transfer students do not have to meet this requirement.

Quantitative Reasoning. Two courses focusing on the role of quantitative information in various settings and on the ability to reason abstractly.

Natural Science. One two-course sequence, one course which must include a laboratory, focusing on the scientific mode of inquiry and the ways in which the natural sciences affect students' everyday experiences and choices as citizens.

Global Inquiry. One course focusing on global interconnections related to economic, political, cultural, social, public health, or environmental issues.

Language. Intermediate competency in a second language.
Arts, Literature, and Performance. Two courses focusing on art, literature, or performance. One course provides an opportunity for exploring the process of creating artistic work while the other course encourages the appreciation and the interpretation of artistic expressions.

Human Experience and Society. Two courses from two different disciplines that explore the forces shaping human activity, relationships, social structures, institutions, and intellectual systems. At least one of the courses taken to satisfy this requirement must be selected from one of these disciplines: Anthropology, Economics, Geography, Linguistics, Political Science, Psychology, or Sociology.

Experiential Learning. One faculty supervised experience involving a significant experiential learning component designed to challenge students to go outside of the bounds of the typical classroom.

Writing Intensive Requirement. Four courses designated writing intensive (WI). Any course designated WI, whether taken for general education, for the major, or as electives will satisfy this requirement.

Speaking Intensive Requirement. Two courses designated speaking intensive (SI). Any course designated SI, whether taken for general education, for the major, or as electives will satisfy this requirement.

## B.A./B.S. MAJOR PROGRAM REQUIREMENTS

A major program within a single discipline requires at least 30 , but no more than 48 , credits. All must be graded credits. Students must take at least one-half of the major program at Mary Washington, earning a grade-point average of 2.00 in the courses. Many students complete two major programs to satisfy diverse personal or career interests. The details and course requirements for each major program are described in the "Courses of Study" section of this Catalog. Students who intend to "double major" should read the section titled "Second Degree or Post-Baccalaureate Major" starting on page 80 of this Catalog.

A first time, first year B.A./B.S. student is eligible to declare a major by submitting the Major/Minor Declaration Form to the chair of the chosen department at the end of their first year or upon the completion of 28 credits. Students are expected to have declared their major at the end of their second year. The department will assign a major advisor. The student may change to a different major simply by visiting the new academic department of interest.

In addition to majors in the traditional arts and sciences disciplines, the University offers an interdisciplinary special major program. A student and faculty advisor may design a special major program by selecting, from two or more departments, courses that define a coherent field of concentration. Three of these interdisciplinary majors, American Studies, Communication and Digital Studies, and Women and Gender Studies, have their general requirements outlined in this Catalog. In other cases, the student working with a faculty member creates the outline of an individualized special major. Examples of recently-approved individual special majors include Biochemistry, Communication, Creative Non-Fictional Writing, Italian Studies, Linguistics, Medieval Studies, Public Affairs, and Journalism. Any student interested in developing an individual special major program must apply to the College of Arts and Sciences Curriculum Committee prior to completing five courses in the proposed special major program. The approval of the Committee is required before an individually designed special major program can be undertaken. Majors in American Studies and Women and Gender Studies may be declared through the regular major declaration process.

## ELECTIVES

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100 -level dance). No student in a regular B.A./B.S. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

## MINORS

To allow students to gain expertise in an area beyond their major field of study, a student may elect to pursue programs of studies designated as minors. Minors are offered by departments and consist of no fewer than 15 and no more than 28 credits. At least three minor courses must be at the 300-400 level.

Individual courses may count for both a minor and General Education requirements. In the case of a major and a minor, the maximum degree of overlap permitted between the major and minor is two courses. In the case of two minors, the maximum degree of overlap permitted between the minors is two courses. No minor courses may be taken on a Pass/Fail basis. A student must earn at least a 2.0 grade-point average in any minor.

Information about specific minors is found in the "Courses of Study in Arts and Sciences" section of this Catalog (beginning on page 93). Contact the offering department for additional details. A student may declare a minor by visiting the academic department of interest. To change to a different minor, the student should simply by visit the new academic department of interest.

## TRANSFER COURSES AFTER MATRICULATION

Students admitted to degree programs at Mary Washington may use courses taken at other colleges and universities to meet Mary Washington degree requirements by obtaining prior approval from the Office of the Registrar. All courses must be approved in advance for transfer credit. Courses to be counted in the major program must also be approved by the student's major advisor or department chair, who helps the student select course work related to major requirements at Mary Washington. Pre-approved transfer credit will be applied to an UMW degree only if the Office of the Registrar receives an official transcript of that course work by the University's final deadline.

## SECOND DEGREE OR POST-BACCALAUREATE MAJOR

A student who has earned a bachelor's degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent B.A. or BLS, if the first degree was a B.S.).

Second Degree. The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the second degree. The student must complete the major program and general education requirements in the Academic Catalog in effect at the time of matriculation into the second degree.

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the major program and general education requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

Post-Baccalaureate Major. A student who has earned a degree at UMW who is completing only an additional major must complete the Major Program requirements printed in the Academic Catalog at the time of major declaration if the student has not discontinued enrollment at UMW for more than two semesters. A student returning after an absence of more than two semesters will be required to complete the major program requirements listed in the Academic Catalog in effect at the time of re-enrollment. Any B.A./B.S. student wishing to pursue a post-baccalaureate major must apply in the Office of the Registrar. A BLS student must apply in the BLS Office.

## TAKING GRADUATE COURSES AS AN UNDERGRADUATE

An undergraduate student with 18 or fewer hours of course work remaining for degree completion may take up to six hours of graduate credit beyond the undergraduate degree requirements. Such graduate credit may be counted toward a master's degree at the University, but will not be used to fulfill undergraduate degree requirements. The student must have a minimum 3.0 cumulative grade-point average and must receive permission from his/her academic advisor and the chair of the department offering the course.

## GENERAL EDUCATION COURSE LIST

First-Year Seminar - Any First-Year Seminar 100 course, History 201 or 202, or Honors 100.

## Quantitative Reasoning

| Biology 260 | Leadership \& Management 316 |
| :--- | :--- |
| Decision Sciences 353 | Music Theory 181 |
| Computer Science 105, 109, 110, 125, <br> 220, 230 | Philosophy 151 |
| Economics 361 | Physics 317 |
| Geography 252 | Psychology 360 |
| Mathematics 110, 115, 120, 121, 122, <br> $200,201,207,280$ | Sociology 364 |

Natural Science - Students should check the requirements of their intended major before selecting a natural science sequence.

| Biology 121-128 | Geology 111-112 |
| :--- | :--- |
| Biology 125-126 | Geology 111- <br> Environmental Science/Geology 210 |
| Biology 121-127 | Geology 111-221 |
| Biology 121-132 | Biology 125-128 |
| Environmental Science 110- <br> Geology 112 | Geography 110-111 |
| Chemistry 105-106 | Geography 110-240 |
| Chemistry 105-107 | Geography 110-241 |
| Chemistry 111-112 | Geography 110-325 |
| Physics 101-108 | Physics 101-102 |
| Physics 105-106 | Physics 103-104 |
| Physics 105-110 |  |

Global Inquiry

| American Studies 333 | German 317 |
| :--- | :--- |
|  | History 122, 141, 142, 356, 357, 358, |
| Anthropology 101, 318, 333 | $360,361,362,366,368,371,372$, |
| $375,377,381,383,384,385,386$, |  |
| 387,390 |  |
| Art History 470 | Geography 101, 102, 236, 332, 338 |
| Chemistry 331 | Interdisciplinary Studies 350F |
| Classics 103, 105, 380 | Linguistics 205 |
| Computer Science 104, 310 | Modern Foreign Languages 201 |
| Economics 382, 383, 384 | Music History and Literature 154 |
| English 206 | Political Science 102 |
| Environmental Science 230 | Psychology 399 |
| French 316 | Religion 210 |
| Spanish 370 | Studio Arts 454 |

Note: An approved education abroad or other field program can fulfill this requirement if it includes a satisfactory evaluation of a written reflection of a student's experience in that program by a University of Mary Washington faculty member. Contact the Center for International Education in Lee Hall for details about how to secure the required pre-approval to meet this requirement via an education abroad experience/project. Note: the same education abroad experience may not be used to satisfy both the Global Inquiry and Experiential Learning requirements.

Language - Intermediate competency in a second language may be demonstrated by: (1) completion of 202 or higher in a language including ASL; (2) a score of 620 or higher on any language SAT II subject test; (3) a score of 4 or higher on any language AP Exam or on any Language and Literature AP Exam; (4) a score of 5 or higher on any group 2 (second language) higher-level IB Exam; (5) a passing score on the University of Mary Washington language competency exam; (6) a rating of "Intermediate" on the Sign Communication Proficiency Interview (SCPI); (7) submitting pertinent documents which verify that a student has had a high school education conducted in a language other than English or has lived extensively in and become fluent in the language of a non-English-speaking country; or (8) achieving a score of 12 or higher on the exemption test administered by NYU School of Continuing and Professional Studies (see details below).

Exemption tests for languages not currently taught at UMW (other than ASL) are available through New York University School of Continuing and Professional Studies. For information test fees and availability, contact NYU directly 212/998-7030 or visit: www.scps.nyu.edu/areas-of-study/foreign-languages/continuing-education/proficiency.html.

Students are responsible for the payment of all required test fees. When contacting the SCPS at NYU, students need to select the appropriate language and indicate that scores should be sent to the Office of the Registrar at UMW. NOTE: All students must take the 16 -point exam. Exemptions will be granted to students scoring 12 points or higher on the 16-point exam.

## Arts, Literature, and Performance - Process

Communication 209
Computer Science 106
Dance 225, 226, 243, 301, 302, 303, 304, 305, 306
English 202, 207, 302, 304, 305, 312, 380
Music Performance 341E, 341F, 341H, 342, 344, 344A1, 344B, 344D, 344E, 344F, 344G, 441

## Arts, Literature, and Performance - Process (continued)

| Music Technology 170, 370 | Music Theory 369, 483 |
| :--- | :--- |
| Spanish 413 |  |
| Studio Art 105 |  |
| Theatre 112, 113, 131, 132, 218, 225, 226, 240, 261, 290, 291, 321, 331, 335, 336, |  |
| $433,434,436$ |  |

Arts, Literature, and Performance - Appreciation

## Anthropology 309

Art History 114, 115
Classics 110, 202, 204
Education 311
English 205, 206, 245, 251
French 326, 327, 328
German 311
Greek 306, 308, 309
Interdisciplinary Studies 204
Latin 305, 307, 352, 353, 354, 358, 434
Music History and Literature 151, 152, 153, 154, 156, 263, 362, 368
Philosophy 212
Religion 205, 206, 301
Spanish 312
Theatre 111,211, 212

Human Experience and Society: at least one of the courses taken to satisfy this requirement must be selected from one of these disciplines: Anthropology, Economics, Geography, Linguistics, Political Science, Psychology, or Sociology.

[^0]Human Experience and Society (continued)

Economics 100, 201, 202
Geography 102, 221, 222, 237, 331, 337
Historic Preservation 101
History 121, 122, 131, 132, 141, 142, 190, 305, 315, 325, 327, 328, 334, $341,356,357,358,360,361,362,366,368,371,372,375,377,381,383$, 384, 385, 386, 387, 395

Interdisciplinary Studies 207
Linguistics 101, 202, 301, 302, 305, 307
Math 207
Philosophy 101, 160, 201, 202, 210, 220, 225, 226, 244A, 283, 284, 301, 302, 318, 320, 335

Political Science 101, 201
Psychology 100
Religion 101, 102, 103, 205, 206, 210, 211, 250, 251, 283, 284, 305, 318
Sociology 105, 155
Theatre 361, 362
Women and Gender Studies 101, 102

Experiential Learning - All courses numbered 491 and 492 (individual studies) and all Undergraduate Research 197 courses meet this requirement. The following courses also satisfy this requirement: American Studies 470, 485, Anthropology 480, Biology 424, Chemistry 493, Classics 485, Communication 481, Computer Science 391, 430, Economics 490, Education 303, 351, 440, English 314, 380, 399, Environmental Science 481, Geography 360E, 365, 485, Historic Preservation 467, 470, History 485, 486, Honors 201, Interdisciplinary 350M, Music Theory 490, Philosophy 485, Psychology 322, Psychology 350, Religion 401, Sociology 364, Spanish 301, Studio Art 475, Theatre 390, 482, and Women and Gender Studies 485. Internships (499) that have a final project/paper that is to be evaluated by the sponsoring faculty member will also meet this requirement. The "community service option" offered by a number of departments also fulfills this requirement (see the following sections of this Catalog for details: Biology, Psychology, and Spanish). A summer research experience also fulfills this requirement (see the Chemistry, Environmental Sciences, Geology, and Mathematics department's section
of this Catalog). A qualifying and approved education abroad experience may also be used to satisfy the Experiential Learning requirement. Contact the Center for International Education in Lee Hall for details about how to secure the required pre-approval to meet this requirement via an education abroad experience/project. Note: the same education abroad experience may not be used to satisfy both the Experiential Learning and Global Inquiry requirements.

Speaking Intensive (SI) - SI courses are indicated in the online schedule of courses. The course must be designated as SI in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as SI while others are not; students should be aware of this fact when selecting courses for their schedule.

Writing Intensive (WI) - WI courses are indicated in the online schedule of courses. The course must be designated as WI in the semester in which it is taken in order to satisfy the requirement. Some sections of a particular course may be designated as WI while others are not; students should be aware of this fact when selecting courses for their schedule.

## AMERICAN STUDIES <br> Department of History and American Studies

Krystyn Moon, Program Director and Career Advisor

Affiliated Faculty<br>Antonio Barrenechea, Department of English, Linguistics, and Communication<br>Joe Dreiss, Department of Art and Art History<br>Stephen Farnsworth, Department of Political Science and International Affairs<br>Brad Hansen, Department of Economics<br>Mary Beth Mathews, Department of Classics, Philosophy, and Religion<br>Will B. Mackintosh, Department of History and American Studies<br>Jeffrey McClurken, Department of History and American Studies<br>Krystyn Moon, Department of History and American Studies<br>Melina Patterson, Department of Geography<br>Gary N. Richards, Department of English, Linguistics, and Communication<br>Jess M. Rigelhaupt, Department of History and American Studies<br>Doug Sanford, Department of Historic Preservation<br>Mara Scanlon, Department of English, Linguistics, and Communication<br>Jason Sellers, Department of History and American Studies<br>Gregg Stull, Department of Theatre and Dance<br>Danny Tweedy, Department of English, Linguistics, and Communication

## The American Studies Program

American Studies is an interdisciplinary major that enables students to explore the complex interactions of peoples, cultures, social structures, and political institutions that have shaped the experiences of peoples living in the United States. In addition to four core courses, students demonstrate the ability to transcend disciplinary boundaries by completing five (5) thematically-assembled courses from affiliated disciplines approved by an American Studies advisor and the Program Director. Example
concentrations include, although are not limited to, the following: gender and sexuality, race and ethnicity, cultural expression, human rights, politics and society, and space and place.

## Requirements for the Major

Thirty-six (36) credits: to include AMST 201, AMST 202, AMST 303, and AMST 485; and 24 credits (eight courses) in related courses selected from a pre-approved list of American Studies electives offered by affiliated departments. From this list of pre-approved electives, five of the eight elective courses must be assembled thematically; that is, they must be organized around a unifying line of inquiry, which must be approved by an American Studies advisor and the Program Director. Internships are encouraged, but only 3 credits can count toward the major.

The major also has a number of requirements for the eight electives. They are as follows: one of these eight electives must deal with the United States prior to 1900, and one course must deal with race and/or gender. [The race/gender and pre-1900 requirements may be met by a single class.] Six of the eight electives must be at the 300 -level or beyond. To ensure breadth, no more than three of the eight elective courses may be from one of the affiliated disciplines.

## Major Electives for American Studies:

 AMST 333, 350, 491, 499; ANTH 211, 212, 341; ARTH 352, 354, 355, 491; COMM 352, 370; ECON 341, 351, 375; ENGL 328, 329, 330, 352, 353, 354, 355, 356, 357, 358, 371, 376EE, 385, 455, 457, 458; GEOG 221, 222, 331, 337; HISP $101,102,206,207,305,320,325$; HIST 303,304 , $305,307,308,310,311,313,314,315,318,319$, $320,321,322,323,325,326,327,328,329,380$, $390,395,396,416,417,426,440,444$; IDIS 203, 205; LING 302, 307, 470J; MUHL 156, 368; PSCI 201, 202, 311, 312, 313, 324, 334, 363, 370, 422; RELG 250, 251, 277, 278, 304, 305; SOCG 304, 313, 315, 331, 332, 341, 411, 421, 440, 442; SPAN 416, WGST 101, 102.
## American Studies Course Offerings (AMST)

201- Introduction to American Studies (3) Introduction to the method and theory of American Studies, its practice and a survey of key texts.

## 202 - Sophomore American Studies Seminar

 (3)Sophomore-level seminar that explores a topic chosen by the instructor.

303 - Junior American Studies Seminar (3) Junior-level seminar that explores a topic chosen by the instructor.

333 - Issues in Human Rights (3)
Analysis and discussion of changing concepts of human rights and the movements that have defended and broadened them. Cross-listed as ANTH 333.

350 - Topics in American Studies (3)
Exploration of specific topics in American Studies.

485 - Senior Thesis (3)
Prerequisite: Senior standing and permission of instructor. A significant research project pursued under the supervision of a faculty mentor.

491 - Independent Study (3)
Directed individual research on problems in American Studies, as approved by the Director. No more than three credits can count toward the major.

## 499 - Internship (variable credit)

Supervised off-campus experience, developed in consultation with the Director. Six credits may be taken but only three credits may count in major.

## ANTHROPOLOGY <br> Department of Sociology and Anthropology

E. Eric Gable, Chair<br>Leslie Martin, Career Advisor

## Faculty

Professor
E. Eric Gable

Associate Professor
Jason James
Assistant Professor
Laura Mentore

## The Anthropology Program

The anthropology major at Mary
Washington concentrates on cultural anthropology-ethnography, theory, and practice. Anthropology courses study the varieties of human culture, both ancient and contemporary; discuss the methods of cultural anthropologists; and present the theories that have been advanced to explain cultural similarities and diversity. Besides making students aware of the extent and impress of human cultural achievement, courses offer opportunities for doing first-hand research in the community of Fredericksburg and, for those interested, elsewhere in the world as well. We also work closely with colleagues in the Department of Historic Preservation to train students interested in archaeology.

Anthropology provides an excellent background for careers in many governmental and private-sector organizations such as museum work, publishing and journalism, advertising and market research, international business, human resources, film, contract archaeology, primary or secondary education, and third-world development, as well as for graduate work in anthropology or related fields.

## Requirements for the Anthropology Major

Thirty (30) credits, including ANTH 101, 298, 299, 480, 481; 15 elective credits in anthropology. Up to 6 credits in SOCG 300 499, HISP 207, and HISP 467 may be taken as electives in the major.

## Anthropology Course Offerings (ANTH)

 101 - Introduction to Cultural and Social Anthropology (3)Introduces the student to non-Western societies and examines fundamentals such as ritual, myth, exchange, production, law, kinship, and marriage; discusses methods and theories pertinent to the material.

211 - The Anthropology of "Race" (3)
Explores why current vernacular understandings of "race" and scientific understandings of "race" diverge so dramatically. Looks at the long history of scientific (mis)understandings of human biological diversity. Interrogates why racialist thinking has been a fundamental component of a western cultural world view.

212 - The Anthropology of Gender (3)
The anthropological approach to gender: cultural definition and social status of female and male; other genders; theories of gender definition and gender hierarchy.

215 - Pre-Columbian Mesoamerica (3) Precontact cultures of Mexico, Guatemala, Honduras, El Salvador, and Belize, from early archaeological sites until the Spanish conquest. Concentration on the "high civilizations" of Olmec, Maya, Teotihuacán, Toltec, and Aztec. Examination of archaeological methods, models, and problems in Mesoamerica.

271 - Special Studies in Ethnography (3) Prerequisite: ANTH 101 or 298 and 299. Concentrates on one culture area not otherwise covered in the curriculum, and related theoretical concerns. Choice of area reflects both student and instructor interests.

## 298 - Ethnography (3)

Corequisite: ANTH 299. An exploration of the methods of anthropological research and discursive styles of the presentation of anthropological materials. An introduction to the practices of cultural anthropology.

299 - Arguments in Anthropology (3) Corequisite: ANTH 298. Examines the ways the discipline of anthropology changes as it enters into arguments about what it means to be human and about what are the purposes and goals of the discipline. Explores how ethnographic data are used, evaluated, and contested in these arguments. An introduction to theories of cultural anthropology.

## 309 - The Anthropology of Art (3)

Anthropological approaches to understanding art, focusing on but not limited to non-western art forms: painting, sculpture, architecture, ceramics, textiles, body art; relationship among meaning, material, and aesthetics; mutual influences of western and non-western art; collection, globalization, and copyright of non-western art.

## 316 - Political Anthropology (3)

Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. A survey of the anthropological contribution to a comparative political science. Focuses on political structures and conflicts in non-western non-state societies. Includes an overview of anthropological studies of nationalism, colonialism, and post-colonial political processes.

317 - Economic Anthropology (3)
Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. Nature of nonwestern economies: production, division of labor, exchange and ceremonial exchange, debt, hierarchy. Impact of globalization and capitalist economic structure on such economies.

## 318 - Anthropology of Religion (3)

Anthropological study of religious ideas and practices of selected non-Western peoples: sacred and profane, spiritual law, morality; sacrifice, shamanism, divination, and prayer; millenarianism and conservatism. Focus on the similarities between non-western religions and so-called world religions; impact of the missionary presence in non-western societies.

## 321 - Anthropology of Food (3)

Prerequisites: ANTH 101 or ANTH 298 and 299 or permission of the instructor. A cross-cultural study of the production and consumption of food; cultural attitudes and meanings of food, food-sharing, and eating; body image and ideal body types; food in a global context. Theoretical concerns include the definition of food and the edible, the conceptual relationship between food and health, and the raw and the cooked. Satisfies the "field-research intensive" requirement for the anthropology major.

## 322 - Symbolic Anthropology (3)

Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. The interpretation of symbols as found in rituals, myths, and everyday life in both western and non-western cultures. Relationship between symbols and action; nature of culture change and persistent cultural structures.

333 - Issues in Human Rights (3)
Analysis and discussion of changing concepts of human rights and the movements that have defended and broadened them. Cross-listed as AMST 333.

## 341 - Practices of Memory (3)

Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. Collective memory, or a shared understanding of the past, plays a vital role in group identity and in the way present events are understood. But memories are made in the present, and they are always selective. What is remembered and forgotten can be extremely important: the stories we tell about our past, the events we commemorate, the museum exhibits we
visit, the films we produce and watch, and the monuments we build all play a significant role in defining our identity by shaping how we view the past.

## 342 - Touring Cultures (3)

Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. In this course we will explore "touring cultures" - cultures of tourists and tourism, as well as the cultures of those toured and the effects of tourism on them. We will examine interactions between tourists, local residents, and institutions, and the ways people, places, and historic periods are produced and packaged for consumption by tourists. Other topics will include the connections between tourism and issues of leisure and consumption, globalization, class and ethnic identities, authentic vs. manufactured experiences, and sex tourism.

343 - Culture and Identity in Europe (3) Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. The economic and political integration of Europe has been justified by the idea of a common European cultural heritage or "civilization." In this course we will read and discuss a range of ethnographic texts to consider changing cultural forms in Europe as well as identities focused on class, gender, ethnicity, and race. We will also examine attempts to define the boundaries of Europe, European citizenship, and European culture - attempts made all the more significant and complex by immigration and cultural diversity as well as the ambiguity of "Europe" and "European."

344 - Urban Theory and Ethnography (3) Prerequisite: permission of the instructor. Historical, theoretical, and ethnographic perspectives on cities, urban life, and habitation. Also included are ethnographies of suburbs, gated communities, and new urbanist developments. Students will practice urban ethnographic field methods in a semester-long research project.

350 - Amazonian Societies (3)
Prerequisite: ANTH 101 or 298 and 299, or permission of instructor. In-depth study of ethnographic literature on Amazonian societies, including kinship, economics, politics, gender, shamanism and other main themes. Western preconceptions about humanity, power and morality are put in comparative context alongside indigenous theories.

365 - Environment and Development Narratives (3)
Prerequisite: ANTH 101. This course focuses on the sub-fields of environmental anthropology and the anthropology of development. It examines cross-cultural theories of nature, space and relationality, with a focus on the interface between indigenous societies and Western discourses and practices pertaining to conservation and socioeconomic development.

371 - Special Topics in Anthropology (3) Prerequisite: ANTH 101 or 298 and 299 or permission of the instructor. Concentrates on an important anthropological topic not otherwise covered in the curriculum; comprehensive readings and discussion. Choice of topic reflects both student and instructor interests.

450 - Ethnographic Field Methods in Guyana (3) Prerequisites: ANTH 350 or permission of instructor. Faculty-lead, six-week study abroad course entailing ethnographic field research in an indigenous community in Guyana, South America. Students participate in community life and develop a research project based on their interests. Advanced instruction in ethnographic/qualitative research methods and indigenous cultures of the Amazon.

480 - Senior Research (3)
Prerequisites: Anthropology major with senior standing; ANTH 298, 299. Independent research, guided by the instructor, on a topic of the student's choice in preparation for writing the senior thesis in the second semester.

481 - Senior Thesis (3)
Prerequisites: Anthropology major with senior standing; ANTH 298, 299, 480. Under the direction of one of the anthropology faculty, students write a $30-35$ page thesis based on the research undertaken during the first semester in 480.

491, 492 - Individual Study and Research (1-3 credits for 491; 1-4 for 492)
Prerequisite: Permission of the instructor. Individual work under the guidance of the instructor. At the wish of the student and with the approval of the instructor, either course may be designated "field-research intensive."

## 499 - Internship (Credits variable)

Prerequisite: Permission of the instructor. Supervised off-campus experience developed in consultation with the instructor. Cannot be counted in the major program.

## ARABIC

## Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair

## Faculty

Lecturer
Maysoon Fayez Al-Sayed Ahmad

## The Arabic Program

The Arabic language is a key element for understanding a group of 22 nations and 200 million native Arabic speakers. There are also over 1 billion Muslims who use Arabic as their liturgical language. The UMW Arabic program offers courses in beginning, intermediate, and advanced Arabic language. Students can complement their study of the Arabic language with related courses in geography, history, international affairs, linguistics, religion, and political science, as well as Arabic literature in translation. In addition, the Arabic program at UMW offers summer study abroad opportunities in Amman, Jordan. Students can spend eight weeks studying intensive Arabic in this beautiful city. The program is open to students in first, second, or third-year Arabic, as well as for more advanced study of standard Arabic.

## Arabic Course Offerings (ARAB)

101, 102 - Beginning Arabic (3, 3)
An introduction to Modern Standard Arabic in both its spoken and written form. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory. Students with credit for a higher level course in Arabic may not take this course.

201, 202 - Intermediate Arabic (3, 3) The second year of instruction in Modern Standard Arabic in both its spoken and written form. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory. Students with credit for a higher level course in Arabic may not take this course.

## 301, 302 - Advanced Arabic (3, 3)

The third year of instruction in Modern Standard Arabic in both its spoken and written form. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory.

## 351 - Classical Arabic Literature in

## Translation (3)

A survey of the major periods and modes of classical Arabic literature from the pre-Islamic to late 'Abbāsid periods. All readings in English translation. Course emphasizes integration of scholarly analysis into readings of literature. Multiple oral presentations required as well as final paper.

## 352 - Modern Arabic Literature in Translation (3)

A survey of the major periods and modes of modern Arabic literature of the 20th century. All readings in English translation. Course emphasizes integration of scholarly analysis into readings of literature. Multiple short papers required as well as final paper.
401, 402 - Fourth-Year Arabic $(3,3)$ The fourth year of instruction in Modern Standard Arabic in both its spoken and written form. Equal emphasis on all five skill areas: speaking, listening, reading, writing, and culture. Required sessions in the language laboratory.

491, 492 - Independent Study Arabic (3, 3) Students may undertake further independent study in Arabic with the permission of the instructor.

# ART AND ART HISTORY Department of Art and Art History 

Carole Garmon, Chair Marjorie Och, Career Advisor, Art History Rosemary Jesionowski, Career Advisor, Studio Art

## Faculty

Distinguished Professor Joseph Di Bella
Professors
JeanAnn Dabb
Joseph Dreiss
Carole Garmon
Marjorie Och
Associate Professor
Rosemary Jesionowski
Assistant Professors
Jon McMillan
Jason M. Robinson

## The Art Program

The department offers two distinct but interrelated majors - art history and studio
art. The Art History major provides the background for a life-long appreciation of art and the intellectual framework for conducting research in art history. The Studio Art major challenges the student to address theory and technique in the making of art. With resources such as a subscription to ARTstor digital database, lecture rooms with sophisticated equipment, a darkroom, studios with skylights, and a computer imaging and multimedia laboratory, the department is fully equipped to serve both majors.

The Art History major explores in chronological sequence the span of Western art within its cultural, philosophical, and historical contexts. Special courses on styles, issues, and individuals in Western and nonWestern art give a broad overview of the complexity of artistic expressions. Proximity to Washington, D.C., Richmond, Baltimore, and New York City, give students first-hand experiences of art works. Visiting scholars and artists offer students important networking opportunities, as well as lectures on recent developments in the field. In the internship program, students gain valuable experience and career contacts by working in museums and art institutions in the Washington, D.C., and Richmond areas, and beyond.

The Studio Art major teaches technical skills, increases aesthetic sensibilities, and advances the student's individual development primarily in the areas of ceramics, drawing, painting, print media (printmaking, photography, and digital imaging), and sculpture/time-based media (performance and video). Upper-level students are encouraged to explore personal approaches and technical skills specific to their area of interest. Studies for the advanced student focus on conceptual approaches to artistic problems.

Internships are also available and offer students professional experience outside the classroom. The Studio Art majors culminate their studies with the capstone course, ARTS 474: Professional Practices in Studio Art and an exhibit in duPont Gallery or by submission of a senior portfolio.

The University Galleries present art exhibitions and events of interest to the University community. Students gain valuable experience in the Galleries as catalogers, researchers, administrative assistants, and exhibition installers.

Requirements for the Art History Major
Thirty-nine (39) credits to include ARTH 114,115 , and 303 ; and thirty (30) additional credits in Art History, including at least one 400 -level seminar course (ARTH 460 or 470) and one course from each of the following chronological periods: Ancient, Medieval, Renaissance, Baroque, and Modern.

## Requirements for the Studio Art Major

Thirty-nine (39) credits to include ARTS 104, 105 (or portfolio exemption), 120, and ARTH 114, 115 and 3 credits in Art History at the 200level or above. An additional twenty-one (21) credits in Studio Art includes at least six credits at the 200-level, twelve (12) credits at the 300-level or above and ARTS 474: Professional Practices in Studio Art.

Studio majors are required to participate in the major assessment and senior exhibition/senior portfolio.

## Art History Course Offerings (ARTH)

 114 - History of Western Art I (3)A survey of Western architecture, painting, and sculpture from the Prehistoric period to the late Gothic.

115 - History of Western Art II (3)
A survey of Western architecture, painting, and sculpture from proto-Renaissance to the present.

260 - Topics in Art History (3)
Prerequisite: ARTH 114 or 115. Explores significant figures, styles, movements, and topics in Western art. Does not fulfill an area requirement but can count as elective credit in the major.

## 270 - Topics in Non-Western and NonEurocentric Art (3)

Prerequisite: ARTH 114 or 115. Major monuments of architecture, sculpture, and painting of non-Western and/or nonEurocentric cultural contexts are explored, as specified by the topic title. Previous topics have included: Asian art, African art, Islamic art, and Pre-Columbian and Latin American art.

303 - Methods of Art History (3)
Prerequisite: Art History major. Permission of instructor required. Introduces philosophies of art historical methodologies and principles and examines the historic development of the discipline.

305 - Egyptian and Near Eastern Art and Archaeology (3)
Prerequisite: ARTH 114. Using the methodologies developed by archaeologists and art historians, this course examines the artistic and architectural traditions of Egypt and the Near East from the prehistoric through the Greco-Roman periods. Cross listed as CLAS 305.

310 - Greek Art (3)
Prerequisite: ARTH 114. Focuses on the development of Greek art from the early Aegean Age through the Geometric, Archaic, Classical, and Hellenistic periods.

## 311 - Roman Art (3)

Prerequisite: ARTH 114. A review of the major developments in Roman art and architecture from the Italo-Etruscan period to the end of the Roman Empire. Special attention is devoted to the topography and major monuments of the ancient city of Rome.

## 315 - Art Museum Studies (3)

Prerequisites: ARTH 114 and 115. Examines the art museum and its role, including: developing and managing collections and exhibits; interpretation and museum education for diverse audiences; funding; governance; and ethics and values. Case studies, field trips, practice, and readings included. Does not satisfy the Art History requirement for the Studio Art major.

317 - Laboratory in Museum Studies (3) Prerequisite: ARTH 315 or HISP 200. Through the creation of a hypothetical museum, students gain experience working in a team environment as they apply their knowledge about museum audience, collections, education, exhibition, organization and administration, physical plant, and public relations. Does not count as an elective for the Art History major. Does not satisfy the Art History requirement for the Studio Art major.

## 325 - Early Christian, Byzantine, and Early

 Medieval Art (3)Prerequisite: ARTH 114. This course traces the development of art and architecture from the beginnings of the Christian tradition through the Byzantine, Hiberno-Saxon, Carolingian, and Ottonian periods. Focus is placed on the major monuments from these periods and the related issues of patronage, culture, and liturgy that influenced their creation.

326 - Romanesque and Gothic Art (3)
Prerequisite: ARTH 114. A survey of the visual arts of western Europe from the 11th through the 15th centuries. The works of architecture, sculpture, and painting are studied with attention to the social, religious, and intellectual frameworks of the societies that produced them. Special emphasis is given to the monastic tradition, pilgrimage and relic cults, and the urban cathedral.

330 - Northern European Art, 1400 to 1600 (3) Prerequisite: ARTH 115. An introduction to the artistic traditions of northern Europe through a focus on such artists as Jan van Eyck, Rogier van der Weyden, Bosch, Dürer, and Bruegel. The relations between patron and image are of particular interest, as are the connections between northern and southern European art during this period.

331 - Early Italian Renaissance (3) Prerequisite: ARTH 115. A survey of the painting, sculpture, and architecture of Italy from about 1300 to 1475 . All major figures, including Giotto, Ghiberti, Donatello, and Botticelli are considered. Works are examined in terms of setting, patronage, and cultural context in addition to questions of style and meaning. Of particular interest is the relationship between artistic expression and the personalities and institutions of the city of Florence.

332 - High Renaissance and Mannerism (3) Prerequisite: ARTH 115. A survey of the painting, sculpture, and architecture of Italy from about 1475 to 1600 . Among the High Renaissance artists considered are Leonardo da Vinci, Michelangelo, Raphael, and Titian. Of special consideration is the nature of the Papacy as a patron of the arts and the city of Rome as a context for artistic activity. The course also considers the reasons for the dissolution of the classical tradition during this time by artists such as Pontormo, Parmigianino, and Giulio Romano.

## 340 - Northern Baroque Art (3)

Prerequisite: ARTH 115. Examines the major works of northern European art from the late sixteenth century until around 1700 . Issues covered include the influence of antiquity, contacts with Italy, patronage of royal courts as well as the new "middle class," and the role of religion. Selected works by Rubens, Van Dyck, Rembrandt, Vermeer, Poussin, and others are studied from a variety of interpretative
points of view including iconography, style, technique, social and economic circumstances, and the relationship of the visual arts to other cultural productions such as literature and music.

## 341 - Italian and Spanish Baroque Art (3)

 Prerequisite: ARTH 115. Examines the major works of Italian and Spanish art from the late sixteenth century until around 1700 , with some attention paid to Islamic influences in Spain as well as influences from the arts of the "New World". Selected works by Caravaggio, Bernini, Borromini, Velazquez, Zurbaran, and others are studied from a variety of interpretative points of view including iconography, style, technique, social and economic circumstances, and the relationship of the visual arts to other cultural productions such as literature and music.350 - Neoclassicism to Impressionism (3) Prerequisite: ARTH 115. Focuses on the periods of Neoclassicism, Realism, and Impressionism in painting and sculpture in Europe, with emphasis on French art.

## 351 - Post-Impressionism to Abstract Expressionism (3)

Prerequisite: ARTH 115. Focuses on the periods of Post-Impressionism to Abstract Expressionism in painting and sculpture.

## 352 - American Art (3)

Prerequisite: ARTH 115. A survey of American painting and sculpture with emphasis on the 19th and 20th centuries.

## 354 - Pop Art to the Present (3)

Prerequisite: ARTH 115. Explores the history of art since 1945 and its critical response.

## 355 - Modern Architecture (3)

Prerequisite: ARTH 115. A chronological survey of 20th-century architecture that focuses on the most noted architects and their work, as well as the revolutionary building technologies and aesthetic theories that made such architecture possible.

360 - Special Studies in Art History (3) Prerequisite: ARTH 114 or 115 or permission of instructor. Concentration in lecture and discussion format on an individual artist, specific problem, limited time period, geographic area(s), or theme. Does not fulfill an area requirement but can count as elective credit in the major. May be offered for study abroad credit by UMW art history faculty.

450 - Topics in Art and Art History (3) Prerequisites: ARTH 114 or 115 and ARTS 105; or permission of instructor. Previous offerings have included: "Mosaics: History and Techniques," that bridge traditional boundaries between Art History and Studio Art.

460 - Seminar: Women and Western Art (3) Prerequisites: ARTH 114, 115, 303, and permission of instructor. Examines the roles women have played in the visual arts in Western traditions, as well as the literature by and about these women. Focus is on the work of women artists, the commissions of women patrons, the responses of audiences to these works, meanings placed on the feminine form, and the work of male artists which has as its subject the female form. Also looks at contemporary issues to examine the role of feminist art as an art which critiques and creates society.

470 - Seminar: Special Studies in Art History (3)
Prerequisites: ARTH 114, 115, 303, and permission of instructor. For Art History majors and other qualified students. Concentration, in seminar format, is on an individual artist, specific problem, limited time period, or theme.

## 491, 492 - Individual Study in Art

History $(3,3)$
Prerequisites: ARTH 114, 115, at least three Art History courses in three different chronological periods, and permission of the department individual study committee and instructor required. For Art History majors only. Includes a faculty-approved research project, oral presentation, and major paper. Vehicle for those seeking honors in Art History. Available on a competitive basis.

499 - Internship (Credits variable) Supervised experience developed in consultation with the Art History faculty. May not be used to satisfy the Art History 400-level research course requirement. A maximum of three credits may count toward the major requirements.

## Studio Art Course Offerings (ARTS)

104 - Digital Approaches to Fine Art (3)
This course introduces basic tools and techniques of computer-generated art in the context of studio art theory and practice.

## 105 - Design Principles (3)

Basic study of design elements and their use in the organization and construction of visual communication in both two and three dimensions. Introduction to basic writing and speaking skills.

## 120 - Drawing I (3)

Introduction to the principles of traditional and experimental drawing practice in diverse media. Reading, writing, research and speaking assignments accompany studio activity.

## 220 - Intermediate Drawing (3)

Prerequisite: ARTS 120 or permission of instructor. Advanced problems in drawing practice with emphasis on the relationship of perceptual, conceptual and media aspects. Reading, writing, research and speaking assignments accompany studio activity.

## 223 - Ceramics I (3)

Prerequisite: ARTS 105 or permission of instructor. Introduction to clay and the processes of hand building and wheel throwing. Studio procedures include clay making, glazing preparation and application, and a variety of firing methods. Reading, writing, research and speaking assignments accompany studio activity.

## 224 - Printmaking I (3)

Prerequisite: ARTS 120 or permission of instructor. Introduction to the principles and techniques of print media. Course uses non-toxic, water-soluble materials. Reading, writing, research and speaking assignments accompany studio activity.

## 225 - Color Theory (3)

Prerequisite: ARTS 105 or permission of instructor. The study of color as it relates to visual perception, artistic expression, and structure; the theories of Munsell, Itten, Goethe, and others are used as tools. Reading, writing, research and speaking assignments accompany studio activity.

## 231 - Sculpture I (3)

Prerequisite: ARTS 105 or permission of instructor. Basic techniques of construction are introduced, focusing on additive and subtractive approaches to form. Fundamentals of creative problem solving are covered, as well as an introduction to studio procedures and the use of power tools and machinery. Reading, writing, research and speaking assignments accompany studio activity.

## 241 - Photography I (3)

Prerequisite: ARTS 105 or permission of instructor. Offers a practical introduction to 35 mm film cameras and basic darkroom techniques for printing black-and-white photographs. Study of the history of photography, along with contemporary directions in both silver-based and digital photography is included. Reading, writing, research and speaking assignments accompany studio activity.

## 242 - Painting I (3)

Prerequisite: ARTS 120 or permission of instructor. Introduction to the principles of traditional and experimental painting practice primarily in oil and acrylic paints. Reading, writing, research and speaking assignments accompany studio activity.

## 263 - Textile Design (3)

Prerequisite: ARTS 105 or permission of instructor. Introduction to the creation of fiber structures using a variety of processes including weaving, needle arts, embroidery, basketry, and quilting. Traditional and non-traditional materials are incorporated with an emphasis on broad experimentation. Contemporary issues in fiber arts is discussed.
Reading, writing, research and speaking assignments accompany studio activity.

## 281 - Topics in Studio Art (3-6)

Prerequisite: Permission of instructor. Offers special topics in the theory and practice of making art.

## 311- Ceramics II (3)

Prerequisite: ARTS 223 or permission of instructor. Emphasis on developing content and expression with ceramic materials through advanced wheel throwing and hand building techniques. High temperature clays and firing methods are covered, along with glaze composition and surface development. Contemporary and historical techniques and research are integrated into course assignments.

## 313 - Life Drawing (3)

Prerequisite: ARTS 220 or permission of instructor. Focuses on comprehensive linear and painterly drawing techniques using the human figure. Emphasis ranges from traditional proportion and composition to experimental and personal interpretations of the figure. Reading, writing, research and speaking assignments accompany studio activity.

## 331 - Sculpture II (3)

Prerequisite: ARTS 231 or permission of instructor. Conceptual approach to space and form is explored through a broad range of media. Performance, installation, and site-specific works employing found objects, constructed objects, sound, movement, etc., are introduced. Focus is on development of individual creative ideas and approaches to sculpture as a visual language. This is a writing and speaking intensive course designed to promote recognition, formulation and articulation of concepts and perceptions about sculpture and extended media.

## 341 - Multiple Imaging (3)

Prerequisites: ARTS 224 or 241. Course expands upon skill and techniques learned in Photography I and Printmaking I, focusing on the idea of creating images in small editions. A variety of photographic, printmaking, and digital media techniques are explored. Reading, writing, research, and speaking assignments accompany studio work.

## 342 - Painting II (3)

Prerequisite: ARTS 242 or permission of instructor. Advanced problems in painting practice including technical exploration in multiple painting media. This is a writing and speaking intensive course designed to promote recognition, formulation and articulation of concepts and perceptions about painting. Emphasis is on individual technical and conceptual development broadened by readings and research.

350 - Photography II (3)
Prerequisite: ARTS 241 or permission of instructor. Course expands upon traditional darkroom techniques and concepts learned in Photography I. Examines contemporary concepts and techniques in photography as a fine art. Reading, writing, research and speaking assignments accompany studio activity.

361 - Experimental Watercolor (3) Prerequisite: One year of drawing or permission of instructor. Problems and techniques in traditional and non-traditional approaches to the medium of watercolor and related water media are explored. Does not fulfill the painting requirement in the major but can count as elective credit.

381 - Special Topics in Studio Art ( 3) Prerequisite: One Studio Art course at the 200 -level. Course provides advanced study in
a specific area of Studio Art with an emphasis on individual processes and extensive creative inquiry. The course is designed to facilitate the development of ideas that contribute to the artist's content and decision-making processes, as well as the development of applied skills needed to manifest these ideas.

450 - Topics in Art and Art History (3) Prerequisite: ARTS 105 and ARTH 114 or 115, or permission of instructor. Offers topics that bridge traditional boundaries between Art History and Studio Art.

## 454 - Approaches to Video Art (3)

Prerequisite: ARTS 105 and ARTH 114 or 115. A comprehensive look at the development of video and other time-based media as important art forms in contemporary art; explores the formal development, content, and format of various multi-media art forms.

470 - Special Studies in Studio Art (3) Prerequisite: Must have completed at least one 300 -level course. Provides a study of a specific area in Studio Art. Topic is selected by faculty in consultation with students.

474 - Professional Practices in Studio Art (3) Prerequisite: Must have completed at least two 300 -level studio art courses. Senior status preferred. Course addresses contemporary issues in art and professional development as an artist. The course covers: development of a body of work, professional development in speaking and writing, artist résumé and statement, artist biography, portfolio preparation, job opportunities, interview practices, graduate school application process, exhibition opportunities, grant funding, artist residencies, and financial accounting.

## 475 - Senior Thesis Seminar (3)

Prequisite: ARTS 474. Senior Studio Art majors are involved in independent research in their chosen medium or mode of expression. Individual studio research is supplemented through group meetings involving critiques, discussions, readings and field trips. Students apply all skills acquired during their course of study towards the development of a cohesive body of artwork. Analytical and conceptual approaches to art making are emphasized.

491, 492 - Individual Study in Studio
Art $(3,3)$
Prerequisite: Must have completed at least one 300 -level studio art course in the medium.

Permission of Studio Art faculty and written proposal required. Allows for independent work under the supervision of the Studio Art faculty. Available on a competitive basis. Vehicle for those seeking honors in Studio Art.

## 499 - Internship (Credits variable)

A supervised experience developed in consultation with the Studio Art faculty. A maximum of three credits may count toward elective credit in the major.

## ASIAN STUDIES

## The Asian Studies Program

Asian Studies is the interdisciplinary study of the language, literature, culture, history, society, politics, philosophy, religion, and traditions of the rich and diverse countries of Asia. Courses in more than 10 academic disciplines contribute to this minor program. The Leidecker Center for Asian Studies, established in 1998, annually sponsors lectures, workshops, concerts, conferences, and cultural events to promote awareness and understanding of Asia. These activities augment the curricular offerings of the minor.
Study abroad is not required for the Asian Studies Minor, but it is both recognized and encouraged. Asian Studies Minor students are eligible to apply to study abroad for a semester or year through: the UMW Korea Exchange Program at Sungshin University in Seoul; the UMW partner program with Lingnan University in Hong Kong; the UMW partner program with Beijing Language and Culture University in China. After consultation with their academic advisors, students may contact the relevant program director for more information. Information on these and other study abroad opportunities in Asia is available from the Center for International Education.

## Requirements for the Asian Studies Minor

Twenty-four (24) credits including two semesters ( 6 credits) or the equivalent of an Asian language (the language credits apply to one language, taken in sequence; the language may be taken at UMW or at an outside institution or as part of a study abroad program for transfer credit); six additional non-language courses, representing at least two different academic disciplines, of which a minimum of 9 credits must be at the 300 level
or above. A maximum of 6 credits Individual Study and/or Internship may count toward fulfilling the minor requirements.

## Asian Studies Course Offerings

CHIN 101 and 102 - Beginning Chinese
CHIN 201 and 202 - Intermediate Chinese
ARTH 270E - Topics in non-Western and non-

## Eurocentric Art: Asian Art

ENGL 353 - Asian American Literature
ENGL 364 - Contemporary Asian Novel
GEOG 300 - Geography of Australia, New
Zealand, and the South Pacific
GEOG 307 - Geography of Asia
HIST 141 and 142 - Asian Civilization I and II
HIST 364 - History of Japan
HIST 365 and 366 - History of China
HIST 368 - Gender in Chinese History
HIST 390 - United States and Vietnam
PHIL/RELG 283 - Hinduism
PHIL/RELG 284 - Buddhism
PHIL/RELG 286 - Confucianism
PHIL/RELG 287 - Daoism
PHIL 440 - Studies in Asian and Comparative Philosophy
RELG 331- Special Studies in Religion (with approved topic)
RELG 340 - Mysticism East and West
PSCI 354 - Politics of South Asia
PSCI 366 - Government and Politics of China
PSCI 367 - East Asia in World Affairs
Interdisciplinary Studies (in any appropriate discipline, with approved topic) Internship (with approved topic)

## BIOLOGY <br> Department of Biological Sciences

Andrew S. Dolby, Chair
Lynn O. Lewis, Career Advisor, Pre-Veterinary
Stephen G. Gallik, Career Advisor, Pre-Medical/Dental,
Deborah A. O'Dell, Career Advisor, Biology and Pre-Physical/Occupational Therapy
Alan B. Griffith, Career Advisor, Allied Health

## Faculty

Professor and William M. Anderson, Jr. Distinguished Chair of Biological Sciences Rosemary Barra
Professors
Andrew S. Dolby
Stephen G. Gallik
Alan B. Griffith
Joella C. Killian
Lynn O. Lewis
Werner Wieland
Associate Professors
Dianne M. Baker
Theresa M. Grana
Deborah A. O'Dell
Abbie M. Tomba
Deborah L. Zies
Assistant Professors
R. Parrish Waters

April N. Wynn
Lecturer
Michael C. Stebar

## The Biology Program

Biology encompasses the study of all living things and their interaction with the environment. The Department faculty is dedicated to providing students with a strong undergraduate education in the fundamental principles of biology, while offering opportunities and encouraging students to pursue specialized areas of interest.
The biology major prepares students for future careers in life sciences research, teaching, biotechnology, conservation biology, medicine, dentistry, and allied health professions. Many graduates pursue advanced degrees in specialized areas such as cellular and molecular biology, bioinformatics, physiology, immunology, entomology, microbiology, ecology, and environmental engineering.

The biology core curriculum is designed to ensure through command of the scientific method and access to inquiry-based learning experiences, while providing a balanced background in cell and molecular biology, organismal biology, and ecology. Elective courses cover a wide variety of specialized topics to meet students' particular interest in biology. An array of laboratory and field experiences further develop working knowledge of the scientific method, teach specific experimental techniques, and promote on going development of quantitative and analytical skills.
All of the equipment and facilities in the department are available for undergraduate student use. Collections of microscope slides, vertebrate and invertebrate specimens and an herbarium are available to enhance learning. Advanced laboratory instrumentation, such as spectrophotometers, thermal cyclers, ultracentrifuges, and two electron microscopes allow students to engage in sophisticated research.

Outstanding junior and senior biology majors have the opportunity to participate in the undergraduate research program. Working with a faculty mentor, the student explores the literature, defines an original research problem, and utilizes the appropriate research and analytical techniques to investigate the problem. On many occasions this work results in presentations at state, regional, and national scientific meetings. Research students who meet minimum requirements ( 3.0 overall GPA and a 3.25 average in biology) may pursue Honors in Biology by writing and defending a thesis on their research project. Financial support for student research is available. Additionally, biology faculty offer research opportunities through the university's undergraduate research (URES 197) program.
The internship program also offers students an opportunity to gain valuable career related experience. Internship credits do not count towards the biology major, but many biology majors have taken advantage of this program to gain experience and to confirm their career objectives.
In addition to the "Experiential Learning" requirement course list, the department has established another mechanism by which biology majors may satisfy the experiential learning general education requirement.

The Biology service learning option requires students to apply knowledge and skills acquired in their formal courses and to reflect upon how such application has augmented their education. Students will complete a service-learning contract in which they will 1 ) identify the agencies for which they will conduct their service, 2) indicate the biology faculty members who will evaluate the academic component of their activities, and 3) describe the duties that they will carry out for these agencies. Students must complete 40 hours of service within 12 months of submitting their contracts. Students completing their community service during their last semester must complete all requirements by March 1 (November 1 for those finishing in December). Contact the biology department chair for additional details.

## Requirements for the Biology Major

Forty credits (40) in Biology. These must include BIOL 132 or $126,210,260,340,341$, and $451 ; 2$ laboratory courses, one designated Research Intensive (BIOL 302, 412, 427, 430, 432, 471A1, 471A2, 491, and certain other 471 courses; and 14 other credits in BIOL major courses. CHEM 317 counts as an elective n the Biology major.

BIOL 121, 132, or BIOL 125, 126, and CHEM 111, 112 are prerequisites for the biology major's core curriculum and should be taken in the student's first year. The core courses of BIOL 210, 260, 340 and 341 aare also prerequisites for various upper-level courses, and should be completed during the second year. All graduating students must participate in the assessment of the major.

Students must earn a C- or better in each BIOL required course that serves as a prerequisite for any other BIOL course. See also the Department of Chemistry's minimum grade requirements for CHEM 111, 112.

## Biology Minor

The biology minor provides a well-balanced foundation in the core principles of biology, while allowing students to pursue more specific interests via upper-level elective courses. Required laboratory experiences reinforce biological concepts and teach critical research processes and skills. The biology minor is especially suitable for students who need a strong background in this discipline to
pursue careers in such fields as biochemistry, biopsychology, or environmental science. Pre-medical or pre-dental students who major in disciplines other than biology are also encouraged to consider the biology minor.

## Requirements for the Biology Minor

Twenty-two (22) credits of courses designated BIOL to include:

- BIOL 210, Introduction to Ecology and Evolution
- BIOL 340, Cellular Biology
- BIOL 341, Genetics
- Plus three (3) additional 300-400 level Biology courses of which 2 must have a laboratory component.

BIOL 481, 491 and 499 may not be counted for minor credit.

## Biology Course Offerings (BIOL)

121 - Biological Concepts (4)
An introduction to biological concepts common to all organisms. Includes discussions of current topics in cellular biology, genetics, ecology, and evolution. Laboratory. Does not count toward the biology major. Credit for only one introductory biology course (121 or 125) can be counted toward degree requirements.

## 125, 126 -Phage Hunters I, II $(4,4)$

This research course sequence is designed for freshmen using a "learning by doing" approach to introductory biology. It is a hands-on, discovery course with an emphasis on critical thinking. Themes covered will be similar to BIOL 121, 132 with an emphasis on microbiology, molecular biology, genomics, and bioinformatics. In the lab students will isolate and characterize their own unique virus. Laboratory. BIOL 126 counts towards biology major and is a prerequisite for all other required courses in the major. Credit for only one introductory biology sequence (121-132 or 125-126) can count toward degree requirements.

## 127 - Human Biology (3)

Prerequisites: BIOL 121. This course will examine the structure and function of the human body, human genetics and the influence of humans on their environment. It will also examine ethical issues that affect humans in these different areas. Students may
not count credit for both 132 and 127 toward degree requirements. Does not count towards biology major.

## 128 - Current Topics in Biology (3)

Prerequisite: BIOL 121. Courses will cover topics in biology that are current interest to non-major students. Topics will be specifically developed to build upon basic biological concepts and will satisfy the second semester of the natural science general education requirement. Does not count toward the biology major.

132 - Organism Function and Diversity (4) Prerequisite: BIOL 121 (C- or better). Survey of organisms, focusing on structure, physiology, and diversity. Plant and animal form and function are emphasized. Laboratory. This course counts toward the biology major and is a prerequisite for all other required courses in the major.

## 203 - Science in Perspective (3)

Prerequisites: Restricted to students accepted into the MS in Elementary Education program and who have completed one of the following two semester sequences in science: BIOL 121132; BIOL 125-126; BIOL 121-127; BIOL 121128, CHEM 105-106; CHEM 105-107; CHEM 111-112; EESC 110-GEOL 112; GEOL 111-112; GEOL 111-EESC 210; GEOL 111-221; PHYS 101-102; PHYS 101-108; PHYS 105-106; PHYS 105-110. Designed to fulfill the need for nonscience majors to have a clear understanding and appreciation of natural and scientific phenomenon. Topics will be presented in a manner that will challenge students to reason, make appropriate connections between various science disciplines and to effectively communicate and apply scientific principles. The course will consist of lecture/ discussions and student presentations. In addition, emphasis will be placed on reading and understanding current scientific literature. Does not count toward biology major

## 210 - Introduction to Ecology and Evolution

(3)

Prerequisites: BIOL 126 or BIOL 132 and CHEM 111 (C- or better in each course). Introduction to ecological principles and the study of interactions of plants, animals, and microbes with each other and with their environment.

231 - Botany (4)
Prerequisites: BIOL 126 or BIOL 132 (C- or better in each course). Survey of the organisms
traditionally placed in the plant kingdom emphasizing morpho-genetic descriptions, life histories, and evolutionary relationships. Laboratory.

251 - History of Biology (3)
Prerequisites: BIOL 132 or 126 (C- or better in each course).Chronological development of selected biological theories and their impact on contemporary biology.

## 260 - The Research Process (3)

Prerequisites: BIOL 126 or 132 (C- or better in each course). Survey of research practices in the biological sciences. Covers statistical methods for data analysis and interpretation, design of surveys and experiments, and scientific communication.

271 - Special Topics (2-4)
Prerequisites: Will be determined for each specific course. Courses on particular topics in biology that are of current interest to students and faculty. Depending on the topic, the specific course may or may not count toward the biology major.

## 301 - Anatomy of the Chordates (4)

Prerequisites: BIOL 132 or 126 (C- or better in each course). The anatomy of selected Chordates with special emphasis on the Vertebrates. Lecture also examines the evolution of the organ systems of vertebrates. Laboratory. Students may not count both 301 and 384 toward the major.

302 - Developmental Biology (4)
Prerequisite: BIOL 260, 340 and 341 ; (C- or better in each course). An examination of the cellular and genetic mechanisms which control the formation of multicellular organisms during reproduction. Laboratory emphasizes scientific investigation and development of research skill in Developmental Biology. Laboratory.

311 - Plant Ecology (4)
Prerequisite: BIOL 210 (C- or better). Ecological principles as applied to plants, including global plant distributions, physiological adaptations, population dynamics, and biodiversity. Laboratory focuses on hypothesis testing and experimental design. Laboratory.

312 - Plant Physiology (4)
Prerequisite: BIOL 340 and 341 (C- or better in each course). Experimental and theoretical treatment of the functional mechanisms in plants. Laboratory.

321 - Invertebrate Zoology (4)
Prerequisite: BIOL 210 (C- or better). Survey of invertebrate phyla emphasizing structural characteristics, life histories, and evolutionary relationships. Laboratory.

## 322 - Animal Ecology (4)

Prerequisite: BIOL 210 (C- or better). Introduction to sample design, population demographics, regulatory mechanisms, and survival strategies of animals. Exercises in data collection, analysis and communication of results. Laboratory.

## 323 - Entomology (4)

Prerequisite: BIOL 126 or BIOL 132 and CHEM 112 (C- or better in each course). Introduction to structure, function and ecology of insects. Students prepare insect collections. Laboratory.

331 - Histology (4)
Prerequisite: BIOL 340 (C- or better). The anatomy and physiology of vertebrate tissues, with an emphasis on human tissues. Laboratory.

## 334 - Exercise Physiology (3)

Prerequisite: BIOL 340 (C- or better). A study of the physiologic responses of the metabolic, cardiovascular, respiratory, muscular, and skeletal systems to acute and chronic exercise in the human.

## 340 - Cellular Biology (4)

Prerequisites: BIOL 126 or BIOL 132 and CHEM 112 (C- or better in each course). Study of cell structure and function. Laboratory.

341 - General Genetics (4)
Prerequisite: BIOL 126 or BIOL 132 and CHEM 112 (C- or better in each course). Structure, function, and transmission of genetic material using examples from viruses, bacteria, and eukaryotic organisms. Application of these principles to human inheritance. Laboratory.

## 342 - Nutrition and Metabolism (3)

Prerequisite: BIOL 340 (C- or better). A study of the scientific basis for the current recommendations for a healthy diet. Course topics include metabolic pathways, macro and micro nutrients, diet and health, and controversial topics in nutrition.

## 363 - Environmental Physiology (4)

 Prerequisites: BIOL 126 or BIOL 132 and CHEM 112 (C- or better in each course). Experimental and theoretical treatment of environmental factors in the physiology of organisms. Laboratory.
## 364 - Animal Physiology (4)

Prerequisite: BIOL 340 (C- or better). A comparative study of physiological systems in animals. Laboratory.

## 371 - Microbiology (4)

Prerequisites: BIOL 126 or BIOL 132 and CHEM 112 (C- or better in each course). Emphasis is placed on bacteria, their morphology, physiology, nutrition, and ecology. Laboratory.

## 372 - Parasitology (4)

Prerequisite: BIOL 126 or BIOL 132 (C- or better in each course). The structure, life histories, and host relationships of invertebrate parasitic forms. Laboratory.

## 384 - Human Anatomy (4)

Prerequisites: BIOL 126 or BIOL 132 (C- or better in each course). The structure of the human body at the cell, tissue, organ, and system levels of organization. Laboratory. Students may not count both BIOL 301 and BIOL 384 toward the major.

385 - Human Physiology (4)
Prerequisites: BIOL 340 (C- for better) and 301 or 384. A systematic study of the physiology of the nervous system, circulation, respiration, digestion, kidney function, muscle function, integument system, homeostasis, hormonal control, and reproduction in the human body. Laboratory.

391 - Immunology (4)
Prerequisite: BIOL 341 (C- or better). Introduction to the principles and theories of host defense with emphasis on humoral and cell mediated responses. Laboratory.

401 - Animal Behavior (3)
Prerequisite: BIOL 210 (C- or better). Integrative survey of the biology of animal behavior. Includes observations of animal behavior in laboratory and field settings.

410 - Neurobiology (4)
Prerequisite: BIOL 340 (C- or better). Examines the structure and function of neurons, neural networks and nervous systems. The laboratory includes physiological experimentation and basic human neuroanatomy. Laboratory.

## 412 - Endocrinology (4)

Prerequisites: BIOL 340 (C- or better). A study of the structure and function of mammalian hormone systems, including the cellular and molecular mechanisms mediating hormone action and control. Laboratory.

## 424 - Tropical Ecology (4)

Prerequisite: BIOL 210 (C- or better). Study of selected tropical ecosystems; exploration of these in a tropical setting; consideration of some problems, uses, and interesting facets of these ecosystems. Field Trip to Puerto Rico or other tropical locality.

## 425 - Vertebrate Zoology (4)

Prerequisite: BIOL 210 (C- or better). A survey of the vertebrates including their natural history, evolution and taxonomy. The student will become familiar with the biological species concept, speciation and nomenclature as they apply to the vertebrates. Laboratory.

## 426 - Biology of Fishes (4)

Prerequisite: BIOL 210 (C- or better). A survey of the fishes, including their anatomy, physiology, natural history, and systematics. The laboratory includes the collection and identification of local species. Each student will be required to develop and complete an independent project. Laboratory.

## 427 - Ornithology (4)

Prerequisite: BIOL 210 and 260 (C- or better in each course). Comprehensive survey of the anatomy, physiology, behavioral ecology, and evolution of birds. Laboratory emphasizes scientific investigation and development of research skills in ornithology. Laboratory.

## 428 - Conservation Biology (4)

Prerequisite: BIOL 210 (C- or better). Study of social science and natural science approaches to the conservation of biological diversity. Course topics include conservation law, conservation values, population genetics, and population dynamics. Laboratory.

## 430 - Molecular Biology of the Gene (4)

Prerequisite: BIOL 260 and 341 (C- or better in each course). The study of gene structure and function at the molecular level. Laboratory emphasizes the use of molecular techniques to carry out original research on the characterization of the gene.

432 - Virology (4)
Prerequisite: BIOL 260 and 341 (C- or better in each course). The study of viruses and their replication cycles. The laboratory emphasizes scientific investigation and development of research skills in virology.

434 - Physiological Adaptations (4)
Prerequisites: BIOL 210 and 340 (C- or better in each course). A study of the adaptations
of physiological systems in animals that have evolved in diverse environments. Laboratory emphasizes hypothesis-testing and experimental design. Laboratory.

## 440 - Biology of Cancer (3)

Prerequisite: BIOL 341 (C- or better). Lectures and discussions focused on various aspects of cancer including epidemiology, cellular and molecular characteristics of cancer cells, carcinogenesis, treatment and prevention.

## 442 - Evolution (3)

Prerequisite: BIOL 341 (C- or better). Lectures and discussion center around modern evolutionary theory and how evolutionary events are measured and documented.

## 443 - The Biology and Biochemistry of Proteins (3)

Prerequisites: BIOL 340 (C- or better) and CHEM 211 or CHEM 317. A study of the principles of protein structure and active site function, including the study of the structure and function of a select group of proteins representing major protein families. Students complete a research project involving the use of major protein databases and on-line analytical tools.

## 444 - Bioinformatics (3)

Prerequisites: BIOL 340, and 341 (C- or better each course). An exploration of the rapidly growing genomics approach to biological problems. Areas of study include genome sequencing, comparative genomics, functional genomics, and diversity. Students complete three research projects based on primary literature and utilize bioinformatics approach to analyze original data. Class time is spent on discussions, on student presentations of research project results, and in collaborative work.

451 - Seminar (2)
Prerequisites: BIOL 210, 260, 340, and 341 (C- or better in each course). Preparation and presentation of an oral report on a topic in the biological sciences. Each seminar section will focus on a particular area of biology. Open only to senior biology majors.

471 - Topics in Biology (2-4)
Prerequisites: BIOL 126 or 132 (C- or better in each course); additional prerequisites as appropriate to specific topic. Specialized topics not offered on a regular basis. Laboratory included with certain topics.

481 - Readings in the Biological Sciences (1) Readings in biological literature selected by the student, who is guided by a staff member. Open to second semester sophomores, juniors, or seniors by permission of Department.

491 - Special Problems in Biology (1-3) Prerequisite: BIOL 481 and C- or better in all BIOL courses. Individual laboratory or field investigation supervised by a staff member. Open to junior and senior majors by permission of Department. No more than six credits of BIOL 491 may be counted toward the biology major.

## 499 - Internship (Credits variable)

Prerequisite: Junior or senior major in good academic standing. Supervised off-campus experience, developed in consultation with the Department. Does not count toward biology major.

## CHEMISTRY

Department of Chemistry

Charles M. Sharpless, Chair<br>Randall D. Reif, Career Advisor

## Faculty

Professors
Raymond B. Scott
Kelli M. Slunt
Associate Professors
Janet A. Asper
K. Nicole Crowder

Leanna C. Giancarlo
Charles M. Sharpless
Assistant Professors
E. Davis Oldham

Randall D. Reif

## The Chemistry Program

Chemistry, the study of the structure, properties, and reactivity of matter, has been called the "central science" because it is central to a fundamental understanding of biology, pharmacy, medicine, agriculture, geology, engineering, and physics. The Chemistry program offers a modern curriculum for the study of chemistry within the general framework of a liberal arts and sciences education. It prepares a student for graduate, medical, or dental school; for employment in the chemical industry; or for secondary school teaching. In addition, several courses provide an important foundation in chemical theory and practice for the study of biology,
geology, environmental science, and the health sciences. The program has been approved by the American Chemical Society (ACS) to offer certified degrees in Chemistry. In general, chemistry is a solid major program around which one can build a career-focused set of courses from other disciplines, e.g., with mathematics and computer science for chemical engineering or industrial chemistry; with economics and business administration for industrial chemistry; with biology for the health sciences; and with geology for energy or environmental research.

The department has well-equipped laboratories to support and reinforce classroom instruction and to provide opportunities for research. Instrumentation for spectroscopy includes ultraviolet-visible and infrared spectrophotometers; two nuclear magnetic resonance spectrometers; and atomic absorption and emission spectrometers with both flame and inductively coupled plasma sources. Other major equipment items include a scanning probe microscope, a gas chromatograph/mass spectrometer system; several other gas and liquid chromatographs; electrochemical analyzers; and a differential scanning calorimeter.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197, CHEM 491, CHEM 493, or CHEM 499. Alternatively, majors may meet this requirement by participating in an approved summer research program, either the UMW Summer Research Program (or a similar program at another college or university) or a program in an industrial laboratory. To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

During the senior year qualified students may pursue Honors in Chemistry by completing an independent research project and writing and defending a thesis. Students interested in post-graduate study or industrial careers in chemistry should pursue an ACS-certified degree.

Requirements for the Chemistry Major
Forty (40) credits including CHEM 111, 112, $211,212,253,254,383,384,387,388,423,453$.

Note: MATH 122 and PHYS 105 and 106 or 101 and 102 are prerequisites to CHEM 383
and should be completed before the junior year.

## Requirements for the ACS-certified Chemistry Degree

CHEM 111, 112, 211, 212, 253, 254, 317, 319, $343,345,383,384,387,388,423,453$ and sufficient additional laboratory hours to total 500 contact hours.

## Chemistry Minor

The study of the structure, properties, and reactivity of matter, Chemistry has been titled the "central science" because of its focal position in a fundamental understanding of other scientific branches, such as biology, medicine, pharmacy, physics, environmental studies, and geology. The minor in Chemistry allows students with interests in these fields to explore the overlap between their disciplines and this "central science." The Chemistry minor fosters both breadth in appreciation of the many facets of the chemical sciences and depth of understanding of each subspecialty. The flexibility afforded by the Chemistry curriculum frees students to tailor the minor to their specific interests, while providing a rigorous academic background for further study. For instance, an interdisciplinary, Biochemistry oriented minor can be designed with the choices of CHEM 211/212, CHEM 317/318 and CHEM 319, while a General Chemistry minor might include CHEM 211/212, CHEM 317, CHEM 343, and CHEM 383.

## Requirements for the Chemistry Minor

 Twenty-three to twenty-five (23-25) credits as follows: CHEM 111, 112; either the 211-212 or 253-254 sequence; and completion of three courses from 317, 318, 319, 331, 332, 343, 345, 383, 384, 387 totaling $7-9$ credits. No more than one of the three 300 -level courses may be a laboratory course.
## Chemistry Course Offerings (CHEM)

101 - Foundations of Chemistry (3) Foundations of Chemistry is designed to develop fundamental mathematical skills and introduce foundational chemistry concepts underlying this central science. The use of mathematics is stressed in the context of chemical problems involving measurement, atoms, molecules, reactions and solutions. This course prepares students interested in pursuing a science major for the General

Chemistry course curriculum. This course does not count toward the chemistry major, minor nor fulfillment of the General Education requirement in the Natural Science. Students who have received credit for CHEM 111 may not enroll in this course.

## 105, 106 - Chemistry and Society with Laboratory I, II (4, 4)

A study of societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. Laboratory. Does not satisfy any major program requirements or serve as a prerequisite to any other chemistry courses. Credit for only one sequence (CHEM 105-106 or 111-112) can count toward degree requirements. Only in sequence.

## 107 - Societal Chemistry (3)

A study of societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. CHEM 105, 106 include a laboratory component. Does not satisfy any major program requirements or serve as a prerequisite to any other chemistry courses. Credit for only one sequence (CHEM 105-106, 105-107, or 111-112) can count toward degree requirements. Only in sequence (105-106 or 105-107).

111, 112 - General Chemistry I, II (4, 4) Introduction to the fundamental principles of chemistry and the more important elements and their compounds. Laboratory. The entrylevel course for additional work in chemistry, biology, and environmental science. Credit for only one sequence (Chemistry 105-106, 105-107, or 111-112) can count toward degree requirements. Only in sequence with a grade of C- or better in CHEM 111.

## 211, 212 - Organic Chemistry I, II (4, 4)

 Prerequisite: A grade of C or better in CHEM 112. The comprehensive study of the structure and reactivity of carbon compounds. Laboratory. Only in sequence with a grade of C or better in CHEM 211.
## 253 - Chemical Analysis I (4)

Prerequisite: A grade of C or better in CHEM 112. Introduction to principles of chemical analysis, statistical treatment of measurements, volumetric and gravimetric analyses, and electrochemical analysis. Laboratory.

## 254 - Chemical Analysis II (4)

Prerequisite: A grade of C or better in CHEM 112. Introduction to sampling in chemical analysis as well as instrumental methods. Laboratory.

317, 318 - Biochemistry I, II (3, 3)
Prerequisite: A grade of C or better in CHEM 212. The application of chemical principles to the study and understanding of the living state. Only in sequence.

319, 320 - Biochemistry Laboratory I, II (1, 1) Corequisites: CHEM 317 and 318. CHEM 253 and 254 are highly recommended. Selected research techniques involving the chemical composition and properties of cells, tissues, and organisms.

## 331 - Environmental Chemistry (3)

Prerequisite: CHEM 112 or permission of the instructor. An introduction to chemical processes that regulate the composition of air, water, and soil. Attention will be paid to understanding chemical equilibrium and kinetics of natural systems and how they are influenced by human actions.

## 332 - Environmental Chemistry Laboratory (1)

Corequisite: CHEM 331. Laboratory experiments and field sampling methods that determine the chemical composition of environmental samples. Offered in alternate years.

## 343 - Inorganic Chemistry (3)

Prerequisite: A grade of C or better in CHEM 112. Modern theories of atomic structure and chemical bonding and their applications to molecular and metallic structures and coordination chemistry.

345 - Inorganic Chemistry Laboratory (1) Corequisite: CHEM 343, Prerequisite: CHEM 253,254 . Selected experiments in the principles of inorganic chemistry, including preparation and characterization of selected inorganic compounds.

383, 384 - Physical Chemistry I, II $(3,3)$ Prerequisites: MATH 122, and PHYS 105 and 106 or 101 and 102, and a grade of $C$ or better in CHEM 112. Thermodynamic, kinetic, quantum mechanical and spectroscopic properties of chemical systems. Only in sequence.
387, 388 - Physical Chemistry Laboratory I,II $(2,2)$
Prerequisites: CHEM 253, 254; Corequisite:

CHEM 383, 384 sequence. Selected experiments involving the investigation of the thermodynamic, electrochemical, kinetic and spectroscopic properties of chemical systems. Only in sequence.

423 - Experimental Methods in Chemistry (4) Prerequisites: CHEM 212 and 253, 254. Spectroscopic, chromatographic, and chemical functional group techniques used in synthesizing and characterizing chemical systems. Laboratory.

## 453 - Seminar (2)

Open to graduating majors only with a GPA of 2.0 or higher, except by permission of the department. Introduction to the chemical literature and information retrieval; oral reports and discussion of selected topics in chemistry.

471 - Advanced Topics in Chemistry (2-3) Prerequisite: permission of the instructor. Advanced treatment of selected topics in chemistry.

## 491 - Individual Study (1-4)

Open to qualified students by permission of the department. Individual investigation of a chemical topic or system under the direction of a member of the department. Students pursuing Honors in Chemistry register for 4 credits of CHEM 491 each semester of the senior year.

## 493 - Chemical Outreach (1-2)

Open to qualified students by permission of the department. Supervised activities that share chemical knowledge and activities with members of the local community (such as K-12 students or teachers) or other UMW groups (such as James Farmer Scholars).

499 - Internship (Credits variable)
Prerequisites: permission of the department. Supervised off-campus experience developed in consultation with the department.

## CHINESE

Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair

Over 1.3 billion people worldwide speak one of the dialects of Chinese and the language is becoming increasingly important in the international context in concert with China's
emergence an important global economic and political force. Mandarin Chinese, the dialect spoken in the Beijing region, is also the mainland's standard language in print and television media. Students pursuing courses in Chinese can also take related courses in Art, History, Political Science, and Religion.

## Chinese Course Offerings (CHIN)

101, 102 - Beginning Chinese $(3,3)$
An introduction to Mandarin Chinese in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. Required sessions in the language laboratory. Students with credit for a higher level course in Chinese may not take this course.

201, 202 - Intermediate Chinese (3, 3) Prerequisite for 201: CHIN 102, or equivalent. Prerequisite for 202: CHIN 201, or equivalent. Second-Year Mandarin Chinese in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing. Required sessions in the language laboratory. Students with credit for a higher level course in Chinese may not take this course.

300 - Topics in Chinese Language and Culture (3)

Prerequisite: CHIN 202 or equivalent. Advanced intermediate instruction in Chinese language and culture.

## CLASSICS <br> Department of Classics, Philosophy, and Religion

Craig R. Vasey, Chair
Liane R. Houghtalin, Career Advisor

## Faculty

Professors
Liane R. Houghtalin
Joseph M. Romero
Associate Professor
Angela L. Pitts

## The Classics Program

Classics focuses on the study of the languages, literatures, and civilizations of ancient Greece and Rome. Since many of the ideas and principles which emerged in the classical world are basic to Western culture, courses
in Classics apply to the study of almost all the liberal arts and sciences.

Students wishing to major in Classics may choose among three concentrations: Latin (see Latin); an interdisciplinary concentration in Classical Civilization; or an interdisciplinary concentration in Classical Archaeology. Students develop their major programs in consultation with a faculty advisor.

While some Classics majors who choose a concentration in Classical Civilization include teacher licensure in their schedule, others take a second major in a related field, such as history, philosophy, religion, English, business, or modern foreign languages. With such a background, graduates have a wide range of opportunities after college, including museum work, archaeology, graduate study, teaching, and translating.

The concentration in Classical Archaeology offers special preparation to those students who wish to pursue museum or field work in archaeology. A concentration in Classical Archaeology joined with a related major such as anthropology, art history, historic preservation, history, or religion will enable a student to add depth of knowledge about the ancient world to his or her study of those disciplines.

Opportunities for study and excavation abroad are readily available to the Classics major. Mary Washington is a member of the Intercollegiate Center for Classical Studies in Rome and the American School of Classical Studies in Athens. Students are welcome to consult with the Classics faculty about programs at these and other institutions. Qualified students are invited to join Eta Sigma Phi, the national honor society for Classics, and to try for departmental honors in their senior year.

## Requirements for Major in Classics with concentration in Classical Civilization

Thirty-three (33) credits in Classics 103-499 and approved courses relating to Classical Civilization, including CLAS 103 and 105, and LATN 202, GREK 202, or at least 3 credits in an upper level Latin or Greek course. At least 6 of the 33 credits (in Classics and approved courses) must be at the level of 299 or above.

Approved courses relating to Classical Civilization are any course in Greek or Latin;

ARTH 114, 305, 310, 311; CPRD 299; CPRD 301, 302, 331 (all with permission); ENGL 319, 320; HIST 331, 332; ITAL 395, 396; PHIL 201, 310, 311; RELG 206, 211, 231 (with permission), 306, 331 (with permission), 341 (with permission). LATN 425 and GREK 425 do not count in the major.

## Requirements for Major in Classics with concentration in Classical Archaeology

 Thirty-three (33) credits, including CLAS 103 and 105 ; either LATN 202 and GREK 202 or 6 credits in upper-level Latin (or, in exceptional cases and with approval, upper-level Greek) courses; at least 6 credits in CLAS/ARTH 305, ARTH 310, 311; HIST 331, 332; at least 9 credits in approved archaeology courses, out of which at least 6 credits must be in Classics.Approved archaeology courses: ARTH/CLAS 305 (if not already counted as fulfilling the requirement listed above);CLAS 351 (with permission), 352 (with permission), 380, 390, 485, 491 (with permission), 492 (with permission), 499 (with permission); ANTH 215; ARTH 315; HISP 207, 462, 463, 467. LATN 425 and GREK 425 do not count in the major.

## Classics Course Offerings (CLAS)

103 - Ideas and Culture: Greek Civilization (3) An introduction to ancient Greek literature, thought, art, drama, architecture, and culture from the Bronze Age to the Hellenistic Era, with particular focus placed upon fifth century Athens.

105 - Ideas and Culture: Roman Civilization (3) An introduction to ancient Roman literature, thought, art, architecture, and culture from the Early Republic to the dissolution of the empire, with particular focus placed upon the Late Republic and Early Empire.

## 110 - Greek and Roman Mythology in Art and Literature (3)

The principal Greek and Roman myths, with emphasis on their appearance in literature and art.

202 - Ancient Tragedy (3)
The dramas of Aeschylus, Sophocles, and Euripides.

204 - Epic Traditions (3)
A comparative study of epic poetry from the ancient civilizations of Mesopotamia, Greece, and Rome.

211 - Greek and Roman Religion (3)
The public, personal, and mystery religions of the Greeks and Romans, and the development of classical religious ideas. Cross-listed as RELG 211.

## 305 - Egyptian and Near Eastern Art and Archaeology (3)

Prerequisite: ARTH 114. Using the methodologies developed by archaeologists and art historians, this course will examine the artistic and architectural traditions of Egypt and the Near East from the prehistoric through the Greco-Roman periods. Cross-listed as ARTH 305.

## 310 - Women in Antiquity (3)

Prerequisite: Sophomore standing or permission of instructor. The nature, roles, and lives of women in ancient Greece and Rome.

351, 352 - Special Studies in Classical Civilization $(3,3)$
Prerequisite will vary, depending on topic. Reading and study in a specialized area of ancient culture.

380 - Archaeology of the Greek and Roman World (3)
Prerequisite: ARTH 114, CLAS 103 or 105. Study of the archaeological excavation of the Greek and Roman world, with emphasis on the history, techniques, and ethics of classical archaeology.

390 - The Ancient City (3)
Prerequisite: ARTH 114, CLAS 103 or 105. The growth and development of selected urban centers in the Greek and Roman world, with emphasis on the archaeological record.

485 - Guided Research in Classics (3)
Prerequisites: senior Classics major or junior Classics major with permission of instructor. Preparation of a senior thesis under the direction of the Classics faculty. Recommended for all Classics majors; required for graduation with Honors in Classics.

## 491, 492 - Individual Study in Classical Civilization (1-4)

Individual study under the direction of a member of the staff. By permission of the department.

## 499 - Internship (1-4)

Supervised off-campus learning experience, developed in consultation with the Classics faculty.

Joint Course Offerings Classics-Philosophy-Religion (CRPD)<br>100 - Topics in Classics, Philosophy, and Religion (3)<br>Special interdisciplinary offerings in Classics, Philosophy, and Religion.

104-Meditation and Contemplative Practices (3)

This course offers a practical, experiental, and theoretical introduction to Mindfulness Meditation and Contemplative Practices. Students learn and practice meditation techniques while exploring the contemplative practices and theories of a variety of cultural traditions (such as Buddhism, Taoism, native American religious traditions, ancient Greek and Roman philosophical and dramatic traditions) and from a variety of disciplinary perspectives (such as dramtury, psychology, philosophy, neuroscience, and religion).

## 299 - Mysterium Humanum Studies (3)

 Different topics of fundamental human concern are treated at different times in this interdisciplinary course involving the entire faculty of the Department of Classics, Philosophy, and Religion. Topics covered in the past include "Wrestling with Death," "The Tempest of Time," "Sex and Society in the West," and "Slavery."301, 302 - Studies in Ancient Languages (3, 3) Introduction to the morphology and syntax of selected ancient languages relevant to the study of Classics, Philosophy, and Religion (such as Coptic, Quranic Arabic, and Sanskrit). By permission of instructor. These courses do not satisfy the College's general education requirement for proficiency in a foreign language.

331 - Crossdisciplinary Topics in Classics, Philosophy, and Religion (3)
A consideration of a theme from the perspective of two or three of the disciplines taught in the Department of Classics, Philosophy, and Religion.

# COMMUNICATION <br> Department of English, Linguistics, and Communication 

Gary N. Richards, Chair

P. Anand Rao, Career Advisor

Faculty<br>Associate Professor<br>P. Anand Rao<br>Assistant Professors<br>Elizabeth A. Johnson-Young<br>Jessy Jasson Ohl

Communication courses enhance understanding of and skill in oral communication by introducing students to communication theories and by providing opportunities to practice communication in a variety of settings. Courses on the 200 -level are performance courses, kept small to allow for individualized instruction.

Courses on the 300 -level offer a historical and theoretical approach to the study of human communication behavior and examine how communication activities affect society. Students interested in more intensive training in persuasive speaking can join the University debate team and receive academic credit for participating in regional and national tournaments. Communication courses at the 300 - and 400-level may count toward the English major.

Students who pursue the Communication and Digital Studies major will develop the critical tools to study and use digital technology to effectively communicate in a dynamic new media environment. The major provides students with the means to navigate the rapidly changing nature of both communication networks and the world they live in. The course work in this major focuses on new theoretical directions in the field of digital studies, and provides students with a dynamic understanding of how communication practices currently work through digital means and how those practices can be adapted to meet their future needs.

## Requirements for the Communication and Digital Studies Major

The major includes thirty-six (36) credits in communication and digital studies courses as follows:

## 1. Communication core ( 15 credits)

Two of the following: COMM 205, 206, 209; COMM 340, 341; and COMM 460 or 491.
2. Digital Studies Core ( 9 credits)

DGST 101; ARTS 104 or CPSC 106 or CPSC110; and DGST 395.

## 3. Electives ( 12 credits)

Four of the following, with at least two at the 300 or 400-level: ENGL 203, 245, 252, 253, 314, 350, 359, 386, 451; MUTC 170; ARTS 341, 454; COMM 353, 357, 499; HISP 303; HIST 325, 427, 428; PSCI 363, 450; or SPAN 413.

Communication Course Offerings (COMM) 205 - Public Speaking (3)
Study of the basic principles of public address; emphasis is on developing a theoretical and practical understanding of oral communication through practice in preparing, delivering, and criticizing speeches in class.

206 - Small Group Communication (3) Study of the theories and principles of effective communication and decision making in small group contexts. Emphasis is on understanding communication dynamics and on improving one's communication capabilities as a participant in and leader of small groups.

## 209 - Argumentation (3)

Study of the use of reasoning in persuasive communication with emphasis on the construction, evaluation, presentation, refutation, and defense of oral arguments.

## 340 - Introduction to Rhetoric and Communication (3)

Introduction to human communication studies, focusing on the history, theory, criticism and mediation of persuasive messages to discover their roles in human society, culture, and contemporary life.

341 - Communication Research Methods (3) Prerequisite: COMM 340 or permission of instructor. This course introduces students to the study of the qualitative, quantitative, and rhetorical methods used to conduct communication research. Topics covered include research design, data collection, data analysis, and a review of the major sources for publication of academic and professional research in communication. Students will complete a communication research project and present their results.

351 - Communication and Political Campaigns (3)
Study of persuasive communication in political campaigns, emphasizing the evaluation and criticism of campaign speeches, televised debates, and political advertising.

352 - American Public Argument (3) Study of the rhetorical features of American public argument. This course examines how affirmation, contestation, and intervention work their way through rhetorical systems to become the basis for conventional wisdom and public policy in the American experience.

## 353 - Visual Rhetoric (3)

Study of the rhetorical use of visual texts with an emphasis on the development and use of visual arguments.

## 354 - Environmental Rhetoric (3)

Study of persuasive strategies used to discuss environmental issues with an emphasis on the interface between the scientific community, policy makers, and the public.

355 - Rhetoric of Science (3)
Study of the rhetorical features of the scientific enterprise.

356 - Rhetoric of Controversy (3)
Study of the rhetorical features of public controversies.

## 357 - Social Media (3)

Study of the communication theory and practice of social media as used by individuals and groups.

370 - Topics in Speech Communication (3) Studies in major figures, movements, and problems in speech communication theory and practice. Consult Schedule of Courses for specific topics.

450 - Studies in Rhetoric and Communication (3)

Study of rhetoric and human communication; consult Schedule of Courses for specific topics.

460 - Seminar in Digital Rhetoric (3) Prerequisite: COMM 341 or permission of instructor. Study of the contemporary function of rhetoric in the context of our globally networked society.

481 - Policy Debate Practicum (1) Credit for satisfactory work on the University's intercollegiate policy debate team. Enrollment by permission of instructor and
the department. No more than 8 credits of Practicum $(481,482,483)$ may count toward the 120 hours required for graduation; four credits may be counted in the English major.

## 482 - Public Debate Practicum (1)

 Credit for satisfactory work on the University's public debate team. Enrollment by permission of the instructor and department. No more than 8 credits of Practicum $(481,482,483)$ may count toward the 120 hours required for graduation; four may be counted in the English major.
## 483 - Communication Consulting Practicum

 (1)Prerequisite: COMM 205 or permission of the instructor. Students will review, study, and apply the principles of public speaking, rhetoric, peer tutoring, and instructional communication. In addition, students will reflect upon, discuss, and write about the application of these principles to their tutoring process. No more than 8 credits of Practicum $(481,482,483)$ may count toward the 120 hours required for graduation; four may be counted in the English major.

## 491 - Individual Study (3)

Individual study under the direction of a member of the staff. By permission of the department. Only three credits of individual study may count toward the English major.

492 - Individual Study (1-6)
Individual study for variable credit under the direction of a member of the staff. By permission of the department. Only three credits of individual study may count toward the English major.

499 - Internship (1-6) Supervised off-campus experience, developed in consultation with the department. Credits variable. Up to three credits may be counted toward the English major.

## COMPUTER SCIENCE Department of Computer Science

Stephen Davies, Chair

Karen Anewalt, Career Advisor
Stephen Davies, Graduate School Advisor

Faculty<br>Professors<br>Karen Anewalt<br>Jennifer Polack<br>Associate Professors<br>Stephen Davies<br>Ron Zacharski<br>Assistant Professors<br>Ian Finlayson<br>Andrew M. Marshall

## The Computer Science Program

Computer Science provides the kind of dynamic, interactive work environment few fields can match. Software developers and analysts invariably work in teams to tackle cutting-edge projects. We join forces with scientists, doctors, military commanders, social psychologists, and others to produce solutions that are bigger than the sum of their parts. We enjoy the satisfaction of working with our peers to make a common vision become reality.

Computer software is probably the most malleable medium invented for human artistry. Unlike the gadgets of the industrial revolution, which were hardwired to a single purpose, computer software essentially mimics the fluidity of the human mind, making it extensible in any direction the author sees fit. Because of this, in Computer Science, we don't just study what "is," but we define what is. Our goal is to invent, create, and solve problems in exciting new ways.
The major is tailor-made for a challenging and practical course of study and paves the way for a dynamic career path and advanced study in the computing and related fields. We also offer a minor in Computer Science for students majoring in other disciplines and offer courses in support of the interdisciplinary Data Science minor. Students have opportunities for individual study, undergraduate research, and internships at technical firms, government offices, or software development agencies.
Students considering a career with the federal government should be aware that the US Department of Operations and

Personnel Management standards require a minimum of 15 credit hours of mathematics in order for employees to be classified as a "Computer Scientist." Students interested in federal employment in this classification are encouraged to take MATH 121, MATH 122, MATH 200, and any additional MATH course numbered 300 or higher. A minor in Applied Mathematics would also provide appropriate preparation.

Students who are considering a career in IT or project management or who are interested in pursuing an MBA should pursue the Computer Science major and a minor in Business Administration.

Students who are interested in a career in Geospatial Systems should consider completing the requirements for Computer Science major and the Geographic Information Science certificate.

## Requirements for the Computer Science Major

46 credits as follows:
A. The following required courses: CPSC $125 \mathrm{~A}, 220,225,240,305,326,340,350,405$, and 430 .
B. Two courses, minimum three credits each, in CPSC numbered 400 or higher (except CPSC 499) that were not used to satisfy any of the preceding requirements. CPSC 491 fulfills this requirement if said course is at least three credits.
C. One course, minimum three credits, in CPSC or MATH numbered 300 or higher, including CPSC 391, 491, or 499 provided the course is at least 3 credits.

A maximum of 3 credits of CPSC 499 can be counted toward the Computer Science major.

## Computer Science Minor Requirements (20 credits):

Any Computer Science course, of at least 3 credits, numbered 100 or higher; CPSC 220 and 240; any three (3) Science courses numbered 300 or above, for a total of at least 9 credits.

Computer Science Course Offerings (CPSC) 104 - The Internet: Technology, Information, and Issues (3)
A survey of the technology and issues underlying the use of the Internet for
communication, resource discovery, research, and dissemination of information in multimedia formats. Topics include an introduction to Internet protocols, Internet history and development, electronic mail, use and functions of a Web browser, accessing Internet services and resources, using the Internet for research, Website design and implementation, and social, legal, and ethical issues related to using the Internet.

## 105 - Problem-solving with Databases (3)

 Introduces relational databases as a common problem-solving tool for business, scientific, and personal applications. Covers issues of information representation, abstraction, redundancy and inconsistency. Introduces database schema design based on the relational model, including semantic modeling, integrity constraints, and language-based queries. Students build sample database solutions based on real-world problem domains. May not be taken after passing CPSC 350.
## 106 - Digital Storytelling (3)

People have been telling stories since the beginning of time, but how is storytelling evolving in the digital age? This course explores how computers are being used to tell stories. We'll study text-based technologies - blogging, the web - and how those models have changed the way we publish and disseminate narratives. We'll also study the roles of audio, video, and images in narrative: computer animation, the ethics of altering digital images, and the Story Corps project. Students will use technology including blogs, virtual worlds, and computer games to create and tell their own stories. No previous computer experience is necessary.

## 109 - Introduction to Modeling and Simulation (3)

This course introduces students to the concepts of modeling and simulation as tools for solving problems in the sciences. Students will be introduced to several modeling and simulation tools and will learn how to decompose problems so they can be represented and solved with the tools. Agent models and system models will be introduced. Example problems to demonstrate the modeling and simulation techniques and tools drawn from a number of scientific fields and will introduce basic problems that will not require depth of knowledge in any particular field of science. Examples of these problems include forest fires, predatory problems, transmission of diseases,
chemical reactions, and elementary particle simulations. Students completing the course will be able to model complex systems and have attained programming skills equivalent to those learned in CPSC 110. Successful completion of this course is sufficient to continue on to CPSC 220. No previous programming experience or computer background is expected.

110 - Introduction to Computer Science (3) This course provides a foundation in computer science for a student who does not have prior programming experience. It provides sufficient support to permit a student to continue in the major program. Topics include an introduction to the algorithm and program development process using a high-level structured programming language and the department's computing facilities. Supervised hands-on experience provided. May not be taken for graded credit after passing any Computer Science course numbered 220 or higher.

## 125A - Introduction to Discrete Mathematics

 (4)Designed to prepare beginning Computer Science majors for advanced study by emphasizing the components of Discrete Mathematics especially related to Computer Science. Topics include number systems, logic, methods of proof, counting techniques, mathematical induction, sets, relations, functions, matrices, graphs and trees.

219 - Foundations for Data Science (3) Skills and tools in acquiring, parsing, manipulating, and preparing data for statistical analysis. Cross listed as DSCI 219.

## 220 - Computer Programming and Problem Solving (4)

Prerequisite: CPSC 109 or 110 or 219 or permission of instructor. Continued coverage of disciplined problem-solving and algorithmic development including emphasis on procedural and data abstraction. Topics include elementary data structures such as arrays, files, and classes. The notions of data modeling and the linking of data type definitions with their associated operations is introduced. Study of program design, coding, debugging, testing, and documentation in a higher level language that supports the objectoriented paradigm. Intended for students who have had previous programming experience.

## 225 - Software Development Tools (1)

This course provides a practical introduction to using common software development tools. Topics will include using the Unix command line, files and permissions, managing processes, the Vim text editor, version control, and writing shell scripts.

240- Object Oriented Analysis and Design (4) Prerequisite: Grade of C or better in CPSC 220 . Theory and practice of the object-oreinted software development paradigm. Focus is on major design principles such as abstraction, encapsulation, inheritance, polymorphism, aggregation, and visibility. Modeling notations for capturing and critiquing designs. Introduction to the concept of design patterns, and coverage of a catalog of common patterns. Students work on team projects to develop collaborative software solutions in an objectoriented language.

## 302 - Computer Ethics (3)

Prerequisite: CPSC 110 or 220 . An examination of issues and events related to ethics, professional conduct and social responsibility as they apply to the field of Computer Science. Includes study of ethical responsibilities and behaviors appropriate for computer scientists.

305 - Computer Systems and Architecture (4) Prerequisites: CPSC 220 and 225 or CPSC 230. This course examines the basic operation of computing systems. It takes a bottom-up approach covering each major component of such systems including hardware, logic circuit design, CPU instruction sets, assemblers, and compilers. Students will gain experience programming in assembly language and C.

310 - Computer Information Systems (4) Prerequisite: CPSC 220. This course introduces the student to the use and implications of information technology in the business environment. This course covers such topics as data management, networks, analysis and design, computer hardware and software, decision support systems, database management systems, transaction processing systems, executive information systems, and expert systems. It also provides activity with computer-based and non-computer-based problems/cases and includes real-world programming projects that are implemented using a high-level programming language.

320 - Statistics for Computer Scientists (3) Prerequisites: Math 121 or CPSC 220. A calculus based mathematical statistics course
with special emphasis on applications in Computer Science. Topics include probability, mass/density functions, discrete/continuous random variables, and general data analysis using a statistical software package.

## 326 - Theory of Computation (4)

Prerequisites: (1) CPSC 125 and 220. Covers structures and concepts relating to the underlying theory of computation and mathematical models of actual physical processes. Also covers a repertoire of advanced algorithms for data processing, and the asymptotic analysis of those algorithms to describe their running time and space requirements. Topics may include formal languages, automata theory, Turing machines, the halting problem, NP-completeness, searching and traversal algorithms, dynamic programming, compression algorithms and random number generation.

340 - Data Structures and Algorithms (4) Prerequisite: CPSC 225 and grade C or better in CPSC 240. Continued study of data modeling and incorporation of abstract data types including linked lists, stacks. Queues, heaps, trees, and graphs. Study of advanced sorting and searching techniques. Provides experience in the use of algorithm analysis. Continued study of program design, coding, debugging, testing, and documentation in an object-oriented higher level language.

345 - Introduction to Computer Security (3) Prerequisite: CPSC 220 and 225 or CPSC 340. Provides an introduction to computer security. The focus is on providing the students a wide overview of current computer security. Topics covered include, but are not limited to, basic cryptography, network security, system security, wireless security, and mobile security. In addition, course labs provide a more hands-on, in-depth exploration of specific topics.

## 348 - Web Application Development (3)

 Prerequisite: CPSC 220. This course provides an introduction to topics related to developing Web applications including: overview of Web technology; introduction to networks and the Internet; popular scripting languages such as PHP, JSP, and JavaScript; electronic payment systems; databases; and security.350 - Applications of Databases (4)
Prerequisite: CPSC 225 and Grade of C or better in CPSC 220 or 340. Presents basic techniques for the design and implementation
of database-driven web applications. Topics include the design of relational and NoSQL databases and scaling techniques such as the use of load balancing and distributed systems. Programming intensive using a dynamic highlevel general-purpose language.

## 370 through 377 - Special Topics in Computer Science (1-4)

Prerequisites: Specified by Instructor.
Lecture or seminar class. Most recently this has included topics such as Information Visualization and Computational Linguistics. May be repeated for credit with a change in topic.

391 - Special Projects in Computer Science (1-4) Prerequisite: Permission of instructor.
Intensive individual investigation of significant research problem under the direction of a faculty member. GPA and course prerequisites apply.

401 - Organization of Programming Languages (3) Prerequisites: CPSC 326 and either CPSC 330 or 340 . A course in programming language construction and design emphasizing the run-time behavior of programs. Alternative implementations of programming language constructs are considered. Techniques for language definition may also be discussed.

## 405 - Operating Systems (4)

Prerequisites: CPSC 305. This course examines the abstractions above the hardware that make a computer usable to both programmers and users. These abstractions include processes, context switching, concurrent programming, semaphores, virtual addressing, transactions, access control, and virtualization. Many of these abstractions are the foundation of operating system kernel development. The abstractions are also applicable to any large scale programming project. Programming intensive.

414 - Network Principles and Applications (3) Prerequisite: CPSC 220. This course provides an introduction to the basic principles of networking. Topics covered in the course include: network topologies, protocols, the OSI Model, methods of data transmission, error detection and correction, TCP/IP, network security and other topics as time permits. This course is theoretical and concept-oriented rather than consisting of the details of specific network packages.

415 - Artificial Intelligence (3)
Prerequisites: CPSC 125 and CPSC 240 or 340. A survey of current artificial intelligence topics including informed search, knowledge representation, knowledge-based systems, and machine learning. Other topics such as image processing, robotics, and language processing, may also be covered. Artificial intelligence programming projects are required.

## 419 - Data Mining (3)

Prerequisites: CPSC 219 or 220. Practical knowledge of data mining, machine learning, and information retrieval. Students will examine the theoretical foundations of a variety of techniques, gain experience with these techniques using open source software, and learn how to apply them to real-world problems. Topics include decision trees, Naïve Bayes, Probabilistic retrieval models, clustering, support vector machines and approaches to web mining, and scalable machine learning applications.

420 - Modeling and Simulation (3) Prerequisite: CPSC 219 or 220 . A robust introduction to techniques of mathematical modeling and computational simulation applied to practical problems. Topics include system dynamics approaches, discrete-event simulation, and agent-based models. Students complete small projects on topics as diverse as population growth, epidemic transmission, queuing theory, and forest fire outbreaks.

## 425 - Parallel Computing (3)

 Prerequisite: CPSC 340. This course provides an introduction to parallel computing, covering topics including parallel architectures, programming techniques and libraries, the study of existing parallel computing systems, and performance analysis. Students will use a variety of hardware to explore current libraries and methods used for parallel programming.
## 430 - Software Engineering (4)

 Prerequisite: CPSC 340 and 350. Techniques for modeling, designing, implementing, and managing large scale computer programs are studied. Studies include software process models, modeling using UML, and application development with a CASE tool. Students work in groups and apply the techniques studied to semester-long projects.440 - Game Programming (3)
Prerequisite: CPSC 340. Students will
design, develop, and implement computer
games that involve real-time, event-driven, and multimedia programming techniques. Students learn the history of computer games and the elements of video game design and architecture.

## 444 - Three Dimensional Computer Graphics (3)

 Prerequisites: CPSC 340. The study of threedimensional modeling involving the use of light, color, texture and transformation; visible surface detection; parallel and perspective projections; clipping algorithms.448 - Advanced Web Application Development (3)
Prerequisite: CPSC 348 or 350 or permission of the instructor. An examination and application of contemporary software technologies focused on providing Web-based services and applications. Students work in teams to design and develop leading-edge projects. In the recent past this has included developing advanced data-driven applications employing AJAX, PHP, and a database management system.

## 470 through 477 - Selected Topics in Computer Science (1-4)

Prerequisite: Specified by Instructor. Treatment of selected topics in Computer Science. Most recently this has included topics such as Cloud Computing, Animation, and Information Systems Security. May be repeated for credit with a change in topic.

## 491 -Individual Study in Computer Science (1-4)

Prerequisite: Departmental permission. Individual study under the direction of a member of the department. GPA and course prerequisites apply. May be repeated for credit with a change in topic. Two semesters of 3 credits of study required for graduation with Departmental Honors.

499 - Internship (Credits variable) Supervised off-campus experience with an academic component, developed in consultation with the department. Only 3 credits may count toward the major and minimum GPA and course prerequisites apply.

## DANCE

Department of Theatre and Dance

Gregg Stull, Chair

Dance classes support the active production program of the Department of Theatre and Dance. Students interested in dance audition for roles and work backstage on the plays and musicals that are a part of the department's season. The Goolrick Dance Suite houses two spacious dance studios with floating floors, and fully-equipped sound systems.

## Dance Course Offerings (DANC)

 121, 122 - Beginning Ballet $(1,1)$ Note for 122: Prerequisite: DANC 121 or permission of instructor. Classical ballet technique for the beginning student, emphasizing vocabulary, alignment, and precision of movement. $\mathrm{S} / \mathrm{U}$ credit only.123, 124 - Beginning Modern Dance (1, 1) Note for 124: Prerequisite: DANC 123 or permission of instructor. Introduction to the technique of modern dance with a focus on breath, alignment, balance, and flexibility. $\mathrm{S} / \mathrm{U}$ credit only.

141, 142 - Beginning Jazz (1, 1)
Note for 142: Prerequisite: DANC 141 or permission of instructor. Introduction to jazz technique through an exploration of alignment, strength, lyricism, and rhythm. S/U credit only.

## 225, 226 - Summer Workshop (1-4,1-4)

Prerequisite: Permission of Department. An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Cross listed as THEA 225, 226.

243 - Dance Improvisation (3)
Exploration of spontaneous dance composition through manipulation of spatial, temporal, and dynamic qualities of movement.

301, 302 - Intermediate Ballet $(2,2)$
Note for 301: Prerequisite: DANC 122 or permission of instructor. Note for 302: Prerequisite: DANC 301 or permission of instructor. Ballet as a discipline, emphasizing exactness and precision of line, creative expression, and historical reference.

303, 304 - Intermediate Modern Dance (2, 2) Note for 303: Prerequisite: DANC 124 or
permission of instructor. Note for 304: Prerequisite: DANC 303 or permission of instructor. Study of the various techniques emphasizing alignment, strength, flexibility, and the aesthetic elements of dance.

305, 306 - Intermediate Jazz (2, 2)
Note for 305: Prerequisite: DANC 142 or permission of instructor. Note for 306: Prerequisite: DANC 305 or permission of instructor. Study of jazz dance techniques and exploration of movement as related to jazz music.

491, 492 - Individual Study (1-3 each)
Research, choreography, or composition of an approved creative project. By permission of the department.

499 - Internship (Credits variable) Supervised, off-campus experience, developed in consultation with the department.

## DATA SCIENCE

## The Data Science Program

The minor in Data Science teaches principles and builds skills in the science of how and why we use data. It is an attractive option that can enhance the credentials for students in a wide variety of disciplines. Decision making across all levels is increasingly shifting away from subjective human judgment and expert opinion and is being replaced by superior evidence-based approaches driven by data and analytical models. Data Science is the discipline concerned with developing and applying analytical models and methods to gain critical insights from data, understand the behavior of complex systems, and make non-trivial decisions optimally, often in response to quickly changing conditions. Businesses and scientists alike use the techniques of this field to perform computational simulations in a multitude of areas where actual experiments are impractical or impossible. The minor in Data Science is designed to provide students with the core fundamental coursework in mathematics, computer science, and business to succeed in this area.

## Requirements for the Data Science Minor

 Fifteen (15) credits to include MATH 200; CPSC/DSCI 219, and any three (3) of the following: DSCI 401, 402, CPSC 419, 420, MATH 300, or any BUAD, DSCI, CPSC,or MATH course numbered 300 or higher, approved by the program director.

## DIGITAL STUDIES

Zach Whalen, Program Director, Department of English, Linguistics, and Communication

Affiliated Faculty<br>Antonio Barrenechea, Department of English, Linguistics, and Communication<br>Martha Burtis, Division of Teaching and Learning Technologies<br>Stephen Farnsworth, Department of Political Science and International Affairs<br>Carole Garmon, Department of Art and Art History<br>James Groom, Division of Teaching and Learning Technologies<br>Rosemary Jesionowski, Department of Art and Art History<br>Elizabeth Lewis, Department of Modern Languages and Literatures<br>Jeffrey McClurken, Department of History and American Studies<br>Carolyn Parsons, Simpson Library P. Anand Rao, Department of English, Linguistics, and Communication

## The Digital Studies Program

Digital Studies engages students in the discovery, analysis, and creation of digital information and media. As an interdisciplinary minor, students will gain the academic and technological skills necessary to analyze information and communicate in an increasingly digital world. The Digital Studies Minor requires an introductory course, a capstone course, and elective courses across disciplines of study that explore the creation and use of digital information and the related social, legal, cultural, epistemological, and historical issues. Students will gain technological skills necessary to critically research, evaluate, and produce digital information and new media. Through collaborative work with digital tools, students will produce new information resources and will apply digital technologies in meaningful ways across various disciplines of study. The capstone experience requires independent research, interdisciplinary analysis,
technological skills, and the production of a publicly accessible digital studies or new media project.

The minor incorporates (among others) the disciplines of American Studies, anthropology, art and art history, communication, computer science, English, historic preservation, and history, Spanish, and Political Science from which students may select elective courses. The minor is open to students from any discipline in the arts and sciences, education, or business colleges at UMW. Students interested in enrolling in the minor should contact the director of the Digital Studies minor for additional details.

## Requirements for the Digital Studies Minor

Eighteen (18) credits to include one introductory course (DGST 101); Capstone: 3 credits. HIST 428; ENGL 451: individual studies (491/492) or other recourses as approved by the director; 12 credits from ARTS 104, 341, 454; COMM 353, 357; CPSC 106; DGST 395, 483 ( up to 3 credits); ENGL 203, 245, 252, 253, 314, 345, 350, 359, 386, 451; HISP 303; HIST 300AA, 325, 428, 427; MUTC 170, 370; PSCI 363, 471K1; THEA 433, 425B, 481 or other courses approved by the director where the courses are chosen to reflect at least two disciplines with 6 credits at 300 -level or higher.

Capstone: 3 credits. HISP 428; ENGL 451; individual studies (491/492) or other courses as approved by the director.

## Digital Studies Course Descriptions (DGST)

101 - Introduction to Digital Studies (3) Introduces an interdisciplinary approach to using technology and specifically provides a foundation for the Digital Studies Minor. Coursework may include digital approaches to creativity, historiography, media analysis and thinking critically about and through digital culture.

201 - Tinkering, Hacking, and Making (3) This course introduces students to the process of making, from initial design to the finished product, and to the emerging maker culture. Students are introduced to a variety of tools and practices for the development and making of objects using innovative software and hardware.
395 - Applied Digital Studies (3)
Prerequisite: DGST 101. Apply the skills and
methodologies developed in the Digital Studies curriculum toward larger-scale, self-designed digital projects that contribute meaningfully to some cultural field, academic discipline, social issue, or other research questions.

483 - Digital Project Consulting Practicum(1) Students in the course will develop their skills with a variety of digital tools and technologies used at the University for the purpose of providing peer support on digital projects. Students will also receive instruction in effective tutoring techniques and creating technical documentation and support materials. No more than 4 credits of DGST 483 may count toward the 120 hours required for graduation; three may be counted in the Digital Studies minor.

## ECONOMICS

Department of Economics

Margaret A. Ray, Chair<br>Steven A. Greenlaw, Career Advisor

## Faculty <br> Professors

Steven A. Greenlaw
Bradley A. Hansen
Margaret A. Ray
Robert S. Rycroft
Associate Professors
W. Shawn Humphrey

Assistant Professor
Donghyun (Don) Lee

## The Economics Program

Economics is a method of analyzing human behavior in any environment subject to scarcity. As such, it provides insight into a wide range of social problems and issues, including unemployment, inflation, poverty, discrimination, international trade, the environment, and the role of government in society.

The Department of Economics offers a contemporary curriculum in economics within the framework of the liberal arts. With an emphasis on writing, speaking, computing, quantitative methods, and other research skills, graduates of our program are equipped with a general education to lead productive lives in the twenty-first century. The University's proximity to Washington, D.C., and a supportive local business community
create stimulating internship opportunities. Economics majors regularly present original research at professional meetings, and co-edit the journal of undergraduate research in economics, Issues in Political Economy. Students with superior academic records who complete an original research project are eligible for honors.

Two organizations that promote the study of economics are associated with the department. The Economics Club encourages discussion of current issues, sponsors speakers and social events, and kindles interaction among students and faculty. It is open to all students. Omicron Delta Epsilon is a national economics honor society for students with superior academic records.

Each year, the department bestows four awards. The Henry W. Hewetson Award is presented to a graduating senior to honor academic achievement and service to the department. The other awards are scholarships to promote study in economics. The James Harvey Dodd Award is given to a junior economics major based on financial need and academic achievement. The Adam Smith Award is given to a graduating senior based on potential for graduate study. The Fred E. Miller Memorial Scholarship is awarded annually to a rising junior or senior who is double-majoring in Economics and Business Administration.

The recommended introductory courses are ECON 201 and 202. ECON 300 introduces students to the methods of economic analysis and should be taken as early as possible in the student's curriculum. These three courses prepare students for 300 and 400 -level courses on a variety of theoretical and applied topics. ECON 490 (Experiential Learning), ECON 491 (Individual Study in Economics), and ECON 499 (Internship) are department courses that expose students to the economics profession through experiential learning in the discipline.

## Requirements for the Economics Major

Thirty-nine (39) credits, to include ECON 201, 202, 300, 303, 304, 361, 462; either ECON 374 or 375 ; and fifteen (15) additional credits in upper-level economics courses. No more than nine (9) hours in experiential learning courses (ECON 490, ECON 491, and ECON 499) may count toward the major. No more than six (6) credits in any one experiential learning course may count toward the major.

## Economics Minor

The minor in Economics allows students to sample what economics has to offer. Students are required to take Principles of Macroeconomics (201), Principles of Microeconomics (202) and either Microeconomics (303) or Macroeconomics (304). These courses lay out the basic theoretical framework that economists use to view the world. Students choose between Introduction to Economic Analysis (300) and Introductory Econometrics (361) as a way to learn how economists do research, use statistical analysis, and present their findings in either written or verbal form. Students fill out the minor by taking 3 courses in the fields of economics that most interest them.

## Requirements for the Economics Minor

Twenty one (21) credits to include ECON 201 and 202; either ECON 303 or 304; either ECON 300 or 361 ; and nine additional credits in upper level economics courses.

## Economics Course Offerings (ECON)

100 - Economics of Social Issues (3) This course surveys contemporary social issues, while focusing on economic aspects and using economic approaches.

201 - Principles of Macroeconomics (3)
One half of the two-semester introduction to economics and economic theory in the context of a general education course. Survey of economic activity in the economy as a whole, focusing on such issues as economic growth and business cycles, unemployment, and inflation.

202 - Principles of Microeconomics (3) One half of the two-semester introduction to economics and economic theory in the context of a general education course. Economic analysis of households, firms, and markets.

300 - Introduction to Economic Analysis (3) Prerequisites: ECON 201 and 202, and major or minor status. This first course in a threecourse sequence (including 361 and 462) on the development of research skills in economics, students will be introduced to the tools of economic analysis, including how to develop a good research question, how to do a literature search in economics hot to find and collect economic data, and how to integrate economic theory and empirical analysis, as well as oral and written presentation skills.

301 - Mathematical Economics (3)
Prerequisites: ECON 201 and 202. Use of mathematical methods in economic analysis. Topics will include equilibrium analysis, comparative statics, and optimizations.

## 303 - Microeconomics (3)

Prerequisites: ECON 201 and 202. Systematic study of the role of the price system in organizing economic activity and an evaluation of its effectiveness.

304 - Macroeconomics (3)
Prerequisites: ECON 201 and 202. Analysis of the determinants of macroeconomic activity including national income, employment, and the price level. Investigation of the capabilities and limits of government stabilization and growth policies.

## 311 - Industrial Economics (3)

 Prerequisites: ECON 201 and 202. Case study analysis of different types of structural organization, behavior, and performance of industry.
## 312 - Government and Business (3)

Prerequisites: ECON 201 and 202. The rationale for and impact of government participation in the marketplace.

321 - Money and Banking (3)
Prerequisites: ECON 201 and 202. Analysis of financial instruments, markets and intermediaries and monetary policy.
322 - Investment Analysis (3)
Prerequisites: ECON 201 and 202. Introduction to portfolio theory and the evaluation of investment alternatives. Topics include the stock market and the valuation of securities.

324 - Economics of Philanthropy and the NonProfit Sector (3)
Prerequisites: ECON 201 and 202. Exploration of economic issues associated with philanthropy and the non-profit sector.

## 331 - Environmental and Resource

 Economics (3)Prerequisites: ECON 201 and 202. The application of economic methods to analysis of environmental and natural resource issues. Public policy issues will also be considered.

332 - Economics of Health (3)
Prerequisites: ECON 201 and 202. A survey of market behavior, institutions, and public policy in the provisions of health services.

## 333 - Introduction to Game Theory (3)

Prerequisites: ECON 201 and 202. Introduction to the theory of games as applied to the study of economics, business and international affairs. Topics include games of complete and incomplete information and non-cooperative and cooperative games.

## 341 - Public Finance (3)

Prerequisites: ECON 201 and 202. Economic analysis of the impact of government spending and taxation on the allocation of resources and distribution of income.

## 342- Law and Economics (3)

Prerequisites: ECON 201 and 202. Economic analysis of legal rules and institutions.

351 - Poverty, Affluence, and Equality (3) Prerequisites: ECON 201 and 202. Economic analysis of the distributions of income and wealth, poverty, and discrimination.

352 - Labor Economics (3)
Prerequisites: ECON 201 and 202. Economics of labor force participation, occupational choice, education and training, mobility, compensation systems, productivity and unemployment. Specific topics at discretion of instructor.

354 - Urban and Regional Economics (3) Prerequisites: ECON 201 and 202. An economic analysis of contemporary urban topics including location theory and economic structure of cities, growth and development of central cities and ghettos, housing, transportation, poverty, crime, and fiscal issues.

## 361 - Introductory Econometrics (3)

Prerequisites: ECON 201, 202, and 300. ECON 361 is the second course of a three-course sequence (including 300 and 462 ) on the development of research skills in economics. The course provides students with a more sophisticated understanding of the statistical methods used in economics and expects students to produce more sophisticated economic research.

374 - History of Economic Thought (3) Prerequisites: ECON 201 and 202. A survey of economic analysis from antiquity to the 21st century. Focus on the 18th and 19th centuries.

375 - American Economic History (3)
Prerequisites: ECON 201 and 202. The study of factors contributing to the economic development of the United States.

381- Mircofinance for Development (3) Prerequisites: ECON 201 and 202. Discusses the economic lives of the poor, provides an introduction to the theoretical foundations of microfinance, and reviews the relationship between microfinance, household level poverty and the development process.

## 382 - International Economics (3)

Prerequisites: ECON 201 and 202. An introduction to international trade, the balance of payments, exchange rate determination, and related issues of international economic policy.

384 - Economic Development (3)
Prerequisites: ECON 201 and 202. An introduction to theories of economic development. Focus on current problems of developing countries.

## 405 - Contemporary Economic Issues (3)

 Prerequisites: ECON 201, 202, 303 and 304. Discussion of contemporary issues in economic theory and policy.462 - Economic Forecasting (3)
Prerequisite: ECON 201, 202 and 361 and Senior Standing. ECON 462 is the third course in a three-course sequence (along with 300 and 361) in the development of research skills in economics. This course has the highest expectation with respect to mastery of statistical methods in economic research and the quality of the research produced. This course serves as a capstone to the study of economics at the University.

482 - International Finance (3)
Prerequisite: ECON 201, 202 and 382 . Survey of the major topics in contemporary international finance: exchange rate determination, international banking, currency speculation, and European Monetary Union.

485 - New Institutional Economics (3)
Prerequisites: ECON 201, 202, and 384.
Comparison of the institutions that govern the production and distribution of goods and services in different countries. Focus on the evolution of institutions and their influence on economic performance.

488 - Seminar in Economics (3)
Prerequisites: ECON 201 and 202. Special topics of interest to faculty and students.

490 - Experiential Learning (1-3)
Prerequisites: ECON 201, 202 and permission of the instructor. A faculty supervised
experience designed to challenge students to go outside of the bounds of the typical classroom.

491 - Individual Study in Economics (1-6) Prerequisites: ECON 201 and 202. Directed individual research on an approved topic in economics. Required for honors in economics.

499 - Internship (Credits variable) Prerequisites: ECON 201 and 202. Supervised off-campus experience, developed in consultation with the department.

## ENGLISH

## Department of English, Linguistics, and Communication

Gary N. Richards, Chair
Maya Mathur, Associate Chair
Marie E. McAllister, Career Advisor
Colin T. Rafferty, Career Advisor, Creative Writing

Faculty
Professors
Chris Foss
Teresa A. Kennedy
Marie E. McAllister
Mary B. Rigsby
Warren G. Rochelle
Mara Scanlon
Associate Professors
Antonio Barrenechea
Eric Lorentzen
Benjamin LaBreche
Maya Mathur
Colin T. Rafferty
Gary N. Richards
Clarence W. Tweedy III
Zachary N. Whalen
Assistant Professors
Shumona Dasgupta
Mary Katherine Haffey
Jon M. Pineda
Sushma Subramanian

## The English Program

English faculty strive to inspire in students a love for literature and for writing, to help students develop analytical and critical skills, and to guide students in improving their writing.

The program offers courses appropriate to students at all levels. Except for ENGL 295, courses on the 200-level are designed for students from all disciplines. Courses on the

300-level may also appeal to a diverse audience but require a more sophisticated study of texts and more advanced writing. Courses on the 400 -level offer a seminar experience in which students study a topic or theme in depth, frequently take charge of class discussions, and produce a major paper or project. To facilitate discussion and individual attention, the department limits enrollment in many classes to 15 to 25 students.

Students who pursue a major in English become familiar with the language, with literary theory, and with a variety of literatures in the language, including works outside the recognized canons. Students practice literary and linguistic analysis, and they develop as writers of different modes and genres.

Many juniors and seniors enroll in internships to test classroom knowledge in the outside world and to explore career interests. Juniors and seniors with appropriate academic standing may also elect to pursue individual studies. An increasing number of students choose to study abroad.

## Requirements for the English Major

Thirty-six credits in English, Linguistics, and Communication courses, as follows: LING 101; ENGL 295; five upper-level literature courses; one $300-$ level linguistics course; one 300level writing course, one 400 -level seminar, six additional credits from the following: ENGL 200, any of the department's 300 - and 400-level courses, department-sponsored internships, and individual studies.

## Creative Writing Concentration

The Creative Writing Concentration offers students the opportunity to focus on the craft and art of writing, editing, and analyzing their own original work, the work of established writers, and peer writers. The concentration requires thirty-six credits in English, Linguistics, and Communication courses as follows: LING 101, ENGL 295, 5 creative writing courses (including 302A, 314, and a 400 -level creative writing seminar): one $300-$ level linguistics course, 3 upper-level literature courses; and three additional credits from the following: ENGL 200, any of the department's 300 - and 400 -level courses, departmentsponsored internships, and individual studies.

## English Course Offerings (ENGL)

101 - Writing Workshop (3)
Instruction and practice in the fundamental techniques of expository and argumentative writing: organization, development, coherence, research methods, mechanics. Frequent workshop approach, with group and tutorial work.

## 200 - Newsgathering (3)

An introduction to the techniques of newsgathering, including practice in interviewing, reporting, and writing various kinds of news stories.

## 202-Writing Seminar (3)

Allows students to hone their writing skills while focusing on writing in a particular context. Topics vary by section; consult schedule of courses for specific topics.

203 - Writing with Digital Media (3)
A digital writing seminar equipping students with the rhetorical and technical tools to engage in contemporary digital discourse through multimodal composition.

205 - The Art of Literature (3)
An introductory course emphasizing the development of the genres of poetry, prose fiction, non-fiction, and drama. Using a historical perspective, students study the role of the reader, the surrounding culture, and the language of the text. The course offers students the tools of critical analysis and encourages the pleasures of close reading and the exchange of ideas.

206 - Global Issues in Literature (3) An introductory course exploring multiple perspectives on a selected global theme or issue as expressed in literature. Attending to the pleasures of literature, the role of the reader, the language of the text, and the social context of literature, the course includes both historical and contemporary texts in traditional and non-traditional forms. It explores the contact zone between Anglo-European perspectives and disparate world cultures outside Western Europe and North America.

## 207 - Literature in Performance (3)

A performance course designed to enhance the performer's appreciation and understanding of the great literature of the world - poetry, prose, and drama - by translating the printed page into the spoken word. Experience presenting material to both adults and children.

245 - Introduction to Cinema Studies (3)
Equips students to analyze and understand the art of narrative cinema within the Anglophone tradition.

251 - Issues in Literature (3)
Significant literary figures, movements, and topics. Specific topics vary.

252 -Literature and Adaption (3)
An introduction to media studies focusing on literary works that have been adapted in nontextual genres.

253- Games and Culture (3)
A critical exploration of cultural value in video games - - including issues of gender, race, sexuality, class, labor and disability - - and the ways by which contemporary and historical games demonstrate, respond to, or represent those concerns.

295 - Methods of Advanced Literary Studies (3) This course introduces students to literary theory and its applications, offers a framework for understanding the historical evolution of literary studies, and introduces students to a range of approaches to the study of texts. The course includes practice in writing commentary on literature. This course is required for English majors and appropriate for other students strongly interested in the analysis of literature.

300 - Principles of Newspaper Writing (3) Prerequisite: ENGL 200 or permission of the instructor. Practice in writing, reporting, and editing various kinds of news stories for print and online publication.

301 - Principles of Magazine Writing (3) Prerequisite: ENGL 200 or permission of the instructor. Practice in writing, reporting, editing, and laying out various kinds of magazine articles, with emphasis on feature writing.
302 - Introduction to Creative Writing (3) Prerequisite: ENGL 295 or permission of the instructor. Introduction to writing fiction and poetry. Primary emphasis on developing students' abilities to write creatively, with periodic attention to examples from established writers.

304 - Creative Writing: Poetry (3)
Prerequisite ENGL 302 or permission of the instructor. An intermediate workshop focused on poetic techniques and writing poetry.

305 - Creative Writing: Fiction (3)
Prerequisite: ENGL 302 or permission of the instructor. An intermediate workshop focused on narrative techniques and writing short fiction.

306 - Topics in Writing (3)
Practice in writing in certain styles and forms. Consult Schedule of Courses for specific topics and prerequisites.

## 307 - Writing Studies (3)

Study and practice of writing as a several-stage process, development of an understanding of what is good writing, development of the ability to criticize constructively one's own writing and the writing of others.

309 - Chaucer and His Age (3)
The study of popular literature in England during the middle ages, with emphasis on Chaucer's Canterbury Tales, Anglo-Saxon heroic narrative, Piers Plowman, and the origins of medieval drama.

## 310 - The Courtly Tradition in Medieval Literature (3)

Development of courtly literature in medieval England, including Chaucer's Troilus and Creseyde, works of the Gawain poet, love lyrics, and native Arthurian material.

312 - Creative Writing: Non-Fiction (3) Prerequisite: ENGL 302 or permission of the instructor. Primary emphasis on developing students' abilities to write nonfiction creatively, with periodic attention to examples from established writers.

313 - Special Topics in Creative Writing (3) Prerequisite: ENGL 302 or permission of instructor. Practice in creative writing in various styles, genres, and forms. Consult Schedule of Courses for specific topics.

314 - The Literary Journal: Professional Practice in Publishing and Editing (3) Prerequisite: ENGL 302 or permission of the instructor. A study of the contemporary national literary journal. Students also design and produce an online journal.

## 317 - Sixteenth-Century British Literature (3)

Studies in non-dramatic literature of the English Renaissance circa 1485-1600. Substantial discussion of cultural contexts. Authors covered will range from Skelton through Spenser, with particular attention to The Faerie Queene.

319 - Shakespeare: The Early Plays (3)
Shakespeare's early development, focusing on the comedies and history plays.

320 - Shakespeare: The Later Plays (3)
Shakespeare's later development, focusing on the tragedies, problem plays, and final romances.

322 - Seventeenth-Century British Literature (3) Studies in the non-dramatic literature of the English Renaissance circa 1600-1667. Substantial discussion of cultural contexts. Authors covered will range from Donne through Marvell.

325 - Restoration and Early EighteenthCentury Literature (3)
British literature from 1660-1740. Poetry, plays, and novels by Dryden, Behn, Swift, Pope, Defoe, Fielding, or others. Emphasis on satire and the birth of the novel.

## 326 - Late Eighteenth-Century British Literature (3)

Novels, poetry, plays, and nonfiction by such writers as Johnson, Burney, Equiano, Sheridan, Austen, and Blake. Emphasis on cultural controversies and literary experimentation.

327 - Jane Austen (3)
A study of the six great novels. May also include attention to the shorter works, Austen's predecessors, successors, and/or film adaptations.

328 - New World Writing in the Colonial Period (3)
This course examines writings from North America, South America, and the Caribbean during the period of exploration, settlement, and conquest. Selections range from 15th-century European travel accounts to 19th-century declarations of national independence. Topics include cultural traditions before European contact, paradigms of New World encounters, race and transculturation, Amerindian and African slavery, and revolutions across the hemisphere.

## 329 - Literature and Nation-Building in the Americas (3)

This course examines writings from North America, South America, and the Caribbean in relation to the establishment of independent nation-states starting in the late eighteenth century. Topics include the emergence of national literary traditions, Native Americans and the frontier, race and miscegenation, the
experience of industrialization, democracy and dictatorship, New World plantation cultures, and the rise of border literature after the U.S.Mexican War.

## 330 - Hemispheric Fiction of the Global Age

 (3)This course examines the wide cultural impact of modernity and postmodernity on the literatures of North America, South America, and the Caribbean. Topics include the construction of American usable pasts, the impact of immigration into the Americans, environmentalism and multinational capitalism among other issues.

## 335 - British Romantic Literature (3)

 Late 18th- and early 19th-century British literature. Emphasis on topical focus points such as the French Revolution and abolition. Writers include Keats, More, Robinson, P. B. Shelley, Wollstonecraft, and W. Wordsworth.
## 336 - British Victorian Literature (3)

British literature from 1830-1914. Emphasis on topical focus points such as The Woman Question and imperialism. Writers include E. B. Browning, R. Browning, Dickens, C. Rossetti, Tennyson, and Wilde.

## 338 - British Victorian Novel (3)

This reading-intensive course will cover writers such as the Brontes, Dickens, Eliot, and Hardy. It also may include significant precursors (such as Austen) and/or successors (such as Ford).

## 340 - Modern British Fiction (3)

Studies in the forms, themes and politics of British fiction, with special emphasis on the genre of the novel, between approximately 1900 and 1945.

## 342 - Contemporary British Fiction (3)

Studies in the forms, themes and politics of British fiction, with special emphasis on the genre of the novel, from approximately 1945 to the present.

## 345 - Film, Text, and Culture (3)

Advanced study in narrative and non-narrative films, focusing on the analysis of films as texts and in relation to other texts (literary, visual, musical, etc.). Consideration of film texts as they originate in, and express, human society.
350 -Electronic Literature (3)
A survey of born digital literature including: hypertext fiction, interactive fiction, playable media, net.art, and other genres of literary
work produced and experienced through computers.

## 352 - African American Literature Pre-1900

 (3)A chronological exploration of poetry, short stories, plays, slave narratives, autobiographies, and other forms of non-fiction written by people of African descent in the United States pre-1900. In addition to its primary focus on literature, the course also explores the interconnections between early African American literature and history, politics, gender, class, race, psychology, and economics.

## 353 - Asian American Literature (3)

The study of texts produced by Asian American authors of diverse national or ethnic backgrounds. Introduces Asian American literary criticism and theory.

354 - African American Literature Post-1900 (3)
A chronological exploration of poetry, autobiographies, non-fiction, short stories, novels, plays, and neo-slave narratives written by people of African descent in the U.S. post 1900. In addition to its primary focus on literature, the course also explores the interconnections between African American literature and history, politics, psychology, popular culture, and economics.

355 - American Romanticism (3)
Expressions of and challenges to 19th-century American romantic ideology in prose and poetry. May include such writers as Emerson, Fuller, Hawthorne, Alcott, Melville, Whitman, and Dickinson.

## 356 - American Realism (3)

Exploration of literary realism in American fiction of the 19th- and early 20th-centuries. Includes writers across a spectrum of race, gender, class, and geographical focus, such as Rebecca Harding Davis, Henry James, Charles Chesnutt, Sarah Orne Jewett, and Stephen Crane.

## 357 - Southern Literature (3)

A representative survey of the literature of the U.S. South from the early 19th century until the present.

358 - Modern American Fiction (3)
Studies in the forms, themes and politics of American fiction, with special emphasis on the genre of the novel, between approximately 1900 and 1945.

359 - Transmedia Fiction (3)
Surveys transmedia fiction: narratives conveyed simultaneously through distinct but complementary media, including film, video games, comics, or music. Students examine major and emerging texts in this genre and engage with current creative practice in the field by producing their own transmedia work.

360 - The Literature of Resistance (3)
Studies in modern literature dealing with current international socio-political conflicts in such regions as Ireland, the Middle East, and South Africa.

## 361 - Caribbean Literature (3)

Studies in themes, movements, significant literary figures and problems in 20th-century Caribbean literature.

364 - Contemporary Asian Novel (3)
Studies in themes, movements, significant literary figures and problems in 20th-century fiction of Asia.

## 365 - Modern Drama (3)

Studies in the development of modern dramatic literature and its aesthetic, political, and performative contexts. The course examines the work of individual dramatists, directors, theorists, and theater scholars.

## 366 - Modern Poetry (3)

Transatlantic study of the themes, techniques, and forms of modern poets from approximately 1880-1945.

369 - Women and Modernism (3)
A study of women's literature in the period called Modernism (roughly 1890-1945), positioned in its sociohistorical context. We will also consider gendered theories of the traditional Modernist aesthetic and the usefulness of codified definitions of Modernism in reading women's writing.
371 - Contemporary Poetry (3)
Studies in poetic themes, techniques, forms, and theories or movements since 1945, including discussion of social and historical contexts.

[^1]375, 376 - Special Studies $(3,3)$
Studies in significant literary figures, movements, and topics. Consult Schedule of Courses for specific topics.

## 378 - Science Fiction (3)

A study of the development of science fiction as literature in a social and historical context, with an emphasis on contemporary works. Students will explore the genre through the major themes and motifs, and as a phenomenon of popular culture.

379 - Fantasy (3)
A study of the development of fantasy as literature in a historical and sociocultural context, with an emphasis on contemporary works. Students will explore the genre through major themes and motifs, and as a phenomenon of popular culture.

## 380 - Practicum in Journalism (1)

Students will review, study, and practice principles of sound journalism in reporting, editing, opinion-writing, and layout and design for the University of Mary Washington's student newspaper, The Bullet. May be repeated for a total of eight credits; four may be counted in the English major.
381 - British Literature to 1800 (3)
Prerequisite: sophomore standing or permission of the department chair. Survey of British literature from the Anglo-Saxon period to roughly 1800 , not including Romanticism.

## 382 - British Literature from 1800 to the Present (3)

Prerequisite: sophomore standing or permission of the department chair. Survey of British literature from Romanticism to the present.

385 - Contemporary American Fiction (3) Studies in the forms, themes and politics of American fiction, with special emphasis on the genre of the novel, from approximately 1945 to the present.

386 - The Graphic Novel (3)
A study of the graphic novel form, including the analysis of graphic novel texts, the integration of related critical theory, and experimentation with producing graphic narrative. Specific topics and themes may include formal approaches to the medium, as well as issues of race, class, and gender as represented in graphic novels.

399 - Community Service Learning (1) Prerequisite: 12 hours in any English, Linguistics, or Communication course work. Community service learning at approved sites. May be repeated up to three times for credit in the major. Fulfills Experiential Learning requirement.

400 - Grellet and Dorothy Simpson Summer Institute in Medieval Studies (6)
Prerequisite: Permission of instructor. An intensive summer institute in a seminar format, this course provides the opportunity for independent undergraduate research on a variety of topics appropriate to medieval studies. Intensive discussion sessions directed by a variety of scholars from inside and outside the University faculty will guide students, ensuring the timeliness and currency of their research.

406 - Advanced Studies in Composition: History and Theory
Prerequisites: ENGL 295 and 307. A survey of the historical roots of the field of composition from its classical roots to the present day, and an examination of contemporary theories and how they are put into practice.

## 411 - Studies in Drama (3)

Major problems, themes, movements, or figures in drama. Consult Schedule of Courses for specific topics.

## 413 - Studies in Poetry (3)

Major problems, themes, movements, or figures in poetry. Consult Schedule of Courses for specific topics.

415 - Studies in the Novel (3)
Major problems, themes, movements, or figures in the novel. Consult Schedule of Courses for specific topics.

445 - Studies in English Literature to 1600 (3) Significant figures, movements, themes, or problems in English literature to 1600. Consult Schedule of Courses for specific topics.

447 - Studies in English Literature, 1600-1800 (3)

Significant figures, movements, themes, or problems in English literature, 1600-1800. Consult Schedule of Courses for specific topics.

449 - Studies in English Literature, 1800Present (3)
Significant figures, movements, themes, or problems in English literature, 1800 to the present. Consult Schedule of Courses for specific topics.

451 - Seminar in New Media (3)
Significant figures, genres, movements and texts in contemporary and emerging new media. Consult the Schedule of Courses for specific topics.

## 455 - Studies in American Literature to 1900 (3)

Significant figures, movements, themes, or problems in American literature through the 19th century. Consult Schedule of Courses for specific topics.

457 - Studies in American Literature, 1900Present (3)
Significant figures, movements, themes, or problems in American literature of the 20th century. Consult Schedule of Courses for specific topics.

458 - Seminar in American Long Poems (3) Study of long poems by primarily modern and contemporary American writers and of their complex relationship to epic, lyric, novel, and drama. Includes among its theoretical approaches an overview of genre theory.

460 - Seminar in Critical Theory (3)
Prerequisites: ENGL 295 or permission of the instructor. Significant figures, movements, themes, and methodologies in critical theory. Consult Schedule of Courses for specific topics.

461 - J.R.R. Tolkien (3)
Prerequisites: ENGL 295 or permission of the instructor. Study of the writing of J.R.R. Tolkien, focuses on his major works from The Hobbit to The Silmarillion.

470 - Seminar in Creative Writing (3)
Prerequisites: ENGL 304 or permission of instructor for ENGL 470A (Poetry); ENGL 305 or permission of instructor for ENGL 470B (Fiction); ENGL 312 or permission of instructor for ENGL 470C (nonfiction); ENGL 304, 305 or 312 or permission of instructor for ENGL 470D (multi-genre). Advanced workshop in creative writing.

474 - Seminar in John Milton (3)
A study of the writing of John Milton, from his earliest works to Paradise Lost.

478 - Seminar in Oscar Wilde (3)
Study of the majority of Wilde's works across the many genres in which he wrote, including his famous plays.

480 - The Peer Tutoring of Writing (1)
Prerequisites: One writing course or Writing

Intensive course beyond ENGL 101, and permission of the instructor. The review and study of principles of effective writing, study of writing formats and expectations for various disciplines, and training in tutoring fellow students. May be repeated for a total of four credits.

491, 492 - Individual Study $(3,3)$
Individual study under the direction of a member of the staff. By permission of the department. Only three credits of individual study may be counted toward the English major.

499 - Internship (1-6)
Supervised off-campus experience, developed in consultation with the department. Up to three credits may be counted toward the English major.

## ENVIRONMENTAL SCIENCE <br> Department of Earth and Environmental Sciences

Charles E. Whipkey, Chair
Michael L. Bass, Career Advisor

## Faculty

Professors
Michael L. Bass
Neil E. Tibert
Grant R. Woodwell
Associate Professors
Ben O. Kisila
Charles E. Whipkey
Assistant Professor
Melanie D. Szulczewski

## The Environmental Science Program

The Environmental Science major promotes the study of our environment and the impact that human activities have on natural systems. Majors may choose either a natural science or a social science perspective according to their interests.

The Natural Science track provides a background in biology, chemistry, and geology. Analytical skills acquired in this program, coupled with an appreciation of socioeconomic considerations, will prepare the student to evaluate environmental problems and work on solutions with the limits of societal resources in mind.

The Social Sciences track focuses on the economic, political, and sociological impact of humans on the environment. This program, coupled with an appreciation of the biotic and physical parameters of the environment, prepares students to evaluate government, industry, and environmentalist positions on environmental issues.

The interdisciplinary nature of the Environmental Science program permits students to select classes from a wide range of course offerings in order to best prepare for personal career goals.

Environmental laws and regulations have produced an increased demand by industry and all levels of government for people trained in the environmental sciences. Both tracks provide a strong background for advanced study or allow placement directly in a variety of career areas. Majors who have the appropriate academic record may pursue Honors in Environmental Science. Financial support for student research is available.

Equipment for ecological studies in terrestrial, fresh water, and marine environments includes live animal traps, plankton and insect nets, seines, dissolved oxygen, conductivity, and pH meters, GPS instruments, and fresh and salt water aquaria. There is access to a small fleet of boats including one equipped for trawling, coring and dredging. In addition, the Department has modern lab facilities equipped with advanced analytical instruments and a computer lab with GIS software.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197, EESC 491, EESC 493, or EESC 499. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus summer research experience developed in consultation with department (such as the UMW Summer Research Program or a similar program at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

## Core Requirements for the Natural Science Environmental Science Major

Forty (40) or forty-one (41) credits, including EESC 110, 315, and 460; EESC 205, or GEOG 250, or GISC 200; BIOL 311 or 322 or EESC

323; CHEM 211 or 253 or 254 or 331 and 332 ( 331 must be taken with 332) or EESC 325; GEOL 111 and 112A; and 12 credits from courses in the Natural Sciences Elective Track list.

## Major Electives for the Natural Sciences Track:

BIOL 231, 260, 311, 312, 321, 322, 323, 341, 363 , 364, 371, 372, 401, 424, 425, 426, 427, 428, 434; CHEM 211, 212, 253, 254, 317, 318, 319, 320, 331, 332, 343, 345, 423; ECON 331, 431; EESC 210 and 211 (must be taken concurrently and count as one elective), 230, 240, 307, 313, 323, $325,326,330,340,355,360,421,481,491,493$, 499; GEOG, 110, 231, 325, 340B, 351A, 355; GEOL 210 and 211 (must be taken concurrently and count as one elective), 240, 301, 311, 313, $325,340,355,360,493$; GISC 351.

## Core Requirements for the Social Science Environmental Science Major

Thirty-eight (38) or thirty-nine (39) credits, including EESC 110 and 460; EESC 205 or GEOG 250 or GISC 200; BIOL 210; CHEM 211 or 253 or 254 , or 331 and 332 ( 331 must be taken with 332), or EESC 325; ECON 331; GEOL 111 and 112A; 12 credits from courses in the Social Sciences Elective Track list.

## Major Electives for the Social Sciences Track:

BIOL 251, 260, 401, 424, 425, 426, 427, 428; ECON 312, 341, 354, 384, 431; EESC 210 and 211 (must be taken concurrently and count as one elective), $230,240,307,313,315,323$, $325,326,330,340,355,360,421,481,491,493$, 499; GEOG 110, 231, 236, 245, 255, 337, 339A, 340B, 351A; GEOL 210 and 211 (must be taken concurrently and count as one elective), 240, $313,315,325,340,355,360,493$; GISC 351; PHIL 330; PSCI 350B, 354A, 355, 362, 366; SOCG 313, 404.

## Prerequisite Courses

BIOL 121,122 and 210 (natural science track), CHEM 111 and 112, and EON 201 and 202 (social science track) are prerequisite to courses in the major program. PSCI 101 and 102 are prerequisites to courses that students may include in the major program. Students expecting to concentrate in Environmental Science should consider taking these courses as general education requirements or as electives.

Environmental Sustainability Minor
Sustainability is usually defined as the ability to meet the resource needs of the current generation without compromising the ability of future generations to meet their own needs. At UMW, we consider four aspects of sustainability: environmental, social, economic, and cultural sustainability. The goal of the Environmental Sustainability minor is to encourage students to analyze our natural and social worlds and to examine approaches to resolving critical resource issues for the long-term. The core classes provide a common introduction to the scientific study of the environment and issues of sustainability. Students then add three additional elective classes that appeal to particular fields and their respective applications of sustainability concepts. Completing this minor will better prepare students for the complex, interdisciplinary challenges our society faces.

## Requirements for the Environmental Sustainability Minor

Eighteen to twenty-one (18-21) credits. Three required core courses: EESC 110, 230, and either 326 or 330 . Three or more elective courses from the following list, totaling at least nine (9) credits: ANTH 365; EESC 210, 307, $313,315,323,325,326,330,355,360,421,481$, 499; ANTH 365; BIOL 424, 428; COMM 354; ECON 324, 351; GEOG 245, 339, 360E; GEOL 210, 313, 315, 325, 355, 360; HIST 322; PHIL 330, 430; SOCG 354; SPAN 345.

## Environmental Science Course Offerings (EESC) <br> 110 - Introduction to Environmental Science (3)

Humans and the environment as viewed from the social and natural sciences.

## 205 - Computer Applications in

 Environmental Science and Geology (3) This course emphasizes the acquisition of spatial data and their display and manipulation within geographic information system software. The class also includes an introduction to the use of global positioning system instruments for data collection. Crosslisted as GEOL 205.
## 210 - Oceanography (3)

Prerequisite: GEOL 111. An introduction to the oceans. Physical and chemical processes affecting seawater; the geology of the seafloor; biological productivity in the oceans; and
environmental challenges involving the oceans. Cross-listed as GEOL 210.

211 - Oceanography Laboratory (1) Corequisite: EESC/GEOL 210. Laboratory investigation of the chemical and physical properties of seawater; the tides; bathymetric measurements; coastal navigation; and marine biological processes. One or more field trips may be scheduled. Cross-listed as GEOL 211.

## 230 - Global Environmental Problems (3)

 Prerequisites: EESC 110 or BIOL 121. An in-depth analysis of specific global environmental problems facing society today. The course connects economic development, population growth, resource consumption and environmental degradation with detailed case studies. The challenges of achieving a sustainable society today will be investigated through the lessons learned from these environmental crises across the world.240 - Field Methods in Environmental Science and Geology (4)
Prerequisites: GEOL 111 or EESC 110 or GEOG 110. The Earth \& Environmental Sciences rely heavily on mapping and collection of physical, chemical, and biological field data. Student enrolled in the course will complete weekly laboratory and hands-on exercises to learn the essential field skills necessary to advance their careers in the earth sciences as technicians, academics, and/or educators. This introductory field course will provide a solid foundation to prepare students for advanced earth science study and/or a general introduction to the field methods within the discipline. Cross-listed as GEOL 240 .

307 - Environmental Soil Science (3) Prerequisites: GEOL 112 or EESC 110 or GEOG 111; prerequisite or Corequisite: CHEM 112. An introduction to soil formation processes; soil classification (both basic classification and soil taxonomy); physical properties of soil; soil chemistry; and discussion of soil as an environmental interface.

## 313- Fluvial Geomorphology (4)

Prerequisites: GEOL 112 or GEOG 111. Use of both classical (qualitative) and modern (quantitative) geomorphological methods to study and understand fluvial processes acting on the surface of the earth, and how landforms and landscapes created by these processes control the global environment. The class will combine field-based observations with
in-class instruction. Cross-listed as GEOL 313. Laboratory.

## 315 - Hydrogeology (4)

Prerequisite: GEOL 112. An introduction to surface water and groundwater flow; the hydrologic cycle; aquifer testing; flow to wells; contaminant transport; and field and laboratory instruments. Cross-listed as GEOL 315. Laboratory.

## 323 - Aquatic Ecology (4)

Prerequisites: EESC 110 and BIOL 210. A study of the structure and function of inland water ecosystems which includes the physical, chemical, geological and biological interactions that determine the composition, spatial and temporal distribution and population dynamics of aquatic organisms in various aquatic habitats. Laboratory.

## 325 - Environmental Geochemistry (4)

 Prerequisites: GEOL 112 and CHEM 112. Study of chemical processes operating at or near the surface of the Earth, in bedrock, soils, streams, the oceans and the atmosphere. Particular attention is given to environmental applications. Cross-listed as GEOL 325. Laboratory.
## 326 - Pollution Prevention Planning (3)

 Prerequisite: EESC 110. This course provides an examination of the legislative and scientific approaches to reduce pollution. Examples include an evaluation of industry processes, recycling, wastewater, air and solid waste treatment.
## 330 - Environmental Regulations Compliance

 (3)Prerequisite: EESC 110. This course provides an introduction to environmental laws and regulations and the techniques that are applied by environmental professionals to maintain compliance.

340 - Energy Resources and Technology (3) Prerequisite: One from BIOL 132, 126, CHEM 112, GEOL 112, EESC 110 or PHYS 106. Intended primarily for science majors, this course investigates the basic science and technology relating to alternative energy sources and fossil fuels. Students who complete this class will have a greater technical understanding of energy sources and the methods used to tap them. Cross-listed as GEOL 340.

355 - Icehouse - Greenhouse Earth (3)
Prerequisites: GEOL 111 or EESC 110. This course examines the history of the Earth's climate system in the context of the two primary modes: Icehouse and Greenhouse. Through critical evaluation of primary literature, written assignments and oral presentations, students will gain an appreciation of the magnitude of temporal and spatial climate reorganizations through time and develop an in-depth understanding of both long and short term cyclic changes that have contributed to the development of our modern climate system. Cross-listed as GEOL 355.

## 360 - Environmental Exploration

(2-4) Specialized courses with a significant field component not offered on a regular basis. Study of selected environments along with relevant geological issues with a focus on active exploration and research. Overnight trips and extra fees required. Permission of instructor required to register. Cross-listed as GEOL 360.

421 - Topics in Environmental Science (2-4) This course will address a special topic in the environmental sciences, such as environmental audits or environmental toxicology. Open to junior and senior Environmental Science majors; others by permission of instructor.

460 - Environmental Science Seminar (2)
Multidisciplinary evaluation of environmental problems. Senior-level seminar for Environmental Science majors; others by permission of the instructor.

481 - Readings in Environmental Science (1-2) Readings in Environmental Science literature selected by the student, who is guided by a faculty member. Open to junior and senior Environmental Science majors by permission of the department.

491 - Special Problems in Environmental Science (1-4)
Individual laboratory or field investigation supervised by a faculty member. Open to junior and senior students with permission of the department.

## 493 - Honors Research (4)

Prerequisites: EESC 491 or GEOL 491 and permission of instructor. Independent research project which may include field and/or laboratory work. Course of study determined by supervising research advisor and student. Successful completion of a written thesis and oral defense is required, and will result in
the student earning Departmental Honors at graduation.

## 499 - Internship (Credits variable)

Prerequisite: Junior or senior Environmental Science major in good academic standing with appropriate background. Supervised offcampus experience, developed in consultation with the department.

## FIRST-YEAR SEMINAR

Students enrolling in the Bachelor of Arts/ Bachelor of Science degree program are required to take one first-year seminar course during their first semester at the University as part of their general education requirements. Students transferring to UMW with credits earned after the student had matriculated to another college or university (in other words, not through high school "dual enrollment" courses) do not have to meet the first-year seminar requirement. Transfer students with fewer than 30 credits may take a first-year seminar course as an elective, if so desired.

Students who do not complete the FSEM course in which they were registered during their first semester after matriculation must complete it during their second semester of enrollment. These students are eligible to replace their failing grade by enrolling in any other FSEM 100 course. However, HIST 201/202 is not considered equivalent to FSEM 100 for this repeat and replacement provision.

Any course listed as FSEM 100 (First-Year Seminar) fulfills the first-year seminar requirement, as does HIST 201, First-Year Seminar in European History, or HIST 202, First-Year Seminar in American History or HONR 100 Honors First-Year Seminar. (See the History and Honors sections of this Catalog).

## 100 - First-Year Seminar (3)

Prerequisite: Freshman standing ( 30 credits or less). The first-year seminar introduces students to the pursuit of intellectual inquiry. Students will study a non-traditional topic in a non-traditional way while exploring the concept of a liberal arts education. Specific topics will vary from course to course. Transfer students enrolling at UMW with more than 30 credits may not take this course.

List of FSEM 100 topics approved for fall 2015.

Note: some of these topics may not actually be offered in the 2014-2015 academic year. Other topics may be developed.

Alfred Hitchcock: The Master of Suspense
Banned and Dangerous Art
Beyond the Selfie: Exploring Digital Identities
Bitches Brew: The Evolution of Jazz
Cinderella / Harry Potter
Cold Case: Theatre Mysteries
Cryptology
Daily Life in Ancient Rome
Digital Don Quixote
Disability Studies: Representations of Autism in
Contemporary Literature and Film
Do You Speak American?
Economic Inequality \& the American Dream
Everybody's a Little Bit Racist
Feminism in the 21st Century
Game Theory
Jane Austin: Film, Web, Text
Lost and Forgotten Manuscripts of Christianity
Making a Difference
No Place Like Home: Housing and Society
Numbers Rule Your World
Part Play, Part Game: Gamers and Gaming
Past, Present, and Future Trends in Commerce
Race and Revolution
Seeing Different: Disability in Media \& Society Sex, Blood, and Celluloid: Dracula from Page to Screen
Solo Mio: Solo Performance and You
Theatre and Social Justice
The Early Crusades
The Geography of Religion
The Grail Legend
The Human Animal
Writing for a Wounded Planet: Literature and Environment in the US and Latin America

## FRENCH <br> Department of Modern Languages and Literature

Elizabeth F. Lewis, Chair
Marie A. Wellington, Career Advisor

## Faculty

Professors
Marie A. Wellington
Associate Professors
Brooke D. Di Lauro
Leonard R. Koos
Scott M. Powers

## The French Program

Through courses in French, students gain linguistic proficiency, as well as understanding of the literatures and cultures of the Frenchspeaking world. Laboratory facilities are used extensively to supplement classroom instruction. Classes are conducted in French.

Double majors are possible, and non-majors may also take advantage of the language program. Students have the opportunity to reside in a campus residence area in which French is spoken and which sponsors various intercultural programs each year. The resident language director of this area is a native speaker of French.

The Department of Modern Languages and Literatures cooperates with a variety of overseas study programs, advises and encourages students wishing to study abroad, and helps in planning their foreign study programs. Credits can be accepted from abroad to fulfill major requirements. The French program runs two four-week, six-credit UMW faculty-led summer study abroad programs in France -- one in Paris and the other in Aix-en-Provence and Paris. The French program also runs a faculty-led spring break experience in Quebec.

In addition, French majors can take advantage of a number of internship opportunities in businesses, government offices, and non-profit agencies located in the Fredericksburg and Washington, D.C. area.

Graduates in French may pursue careers in government or in private fields in which the knowledge of this language and culture is essential, including interpreting, translating, research, social services, education, or international business.

## Requirements for the French Major

Thirty-six (36) credits, including FREN 311, $312,326,327,328,411,412$, and 481 ; two courses chosen from FREN 313, 315, 316 or 319; two additional French literature courses.

## French Minor

The French minor is designed to provide the student with an advanced level of language proficiency augmented by a basic knowledge and familiarity with the cultures and literatures of France and the francophone world. In addition to the minor's required French language classes or their equivalents, students are able to select 300- and 400-level courses in francophone culture, literature, and applied language. Students may also include individual study (FREN 491, 492) and three-credit internships (FREN 499) as part of their minor programs. Approved French courses from study abroad programs may also be included among the electives of the French minor.

## Requirements for the French Minor

Twenty-four (24) credits. Students must complete FREN 201 and 202, or FREN 205, or additional French classes at the 300-level or above to equal six credits, FREN 311, FREN 312, and any four (4) additional French classes at or above the 300-level.

## Business French Minor

The Business French minor is an interdisciplinary program of study that combines courses in French language and culture with selected courses in Business and/or Economics. The Business French minor provides the student with a basic understanding of business and economics as well as the ability to communicate about them in French in a professional context. Students also include a three-credit internship as part of their minor programs. Approved French courses from study abroad programs may also be included among the electives of the French minor.

## Requirements for the Business French Minor

Twenty-four (24) credits, including FREN $311,312,313$, and $316 ; 3$ credits from FREN 411,412 , or 499 ; and one of the following sequences: a) ACCT 101, ACCT 102, and one College of Business course at the 300-level or higher; or B) ECON 201, ECON 202, and one

Economics course at the 300 -level or higher. Business French minors can take no more than 29 credits in Business without declaring a Business major.

## French Course Offerings (FREN)

101, 102 - Beginning French (3, 3)
Prerequisite for 102: FREN 101 or equivalent. Grammar, composition, conversation, reading, laboratory use. Students with credit for a higher level course in French may not take this course.

## 105 - Intensive Beginning French (6)

Grammar, composition, conversation, reading, laboratory use. Students who have taken FREN 101 are not eligible to take this class. Students with credit for a higher level course in French may not take this course.

## 201, 202 - Intermediate French $(3,3)$

Prerequisite for 201: FREN 102, or equivalent.
Prerequisite for 202: FREN 201, or equivalent.
Grammar review, reading, composition, laboratory use, oral work. Students with credit for a higher level course in French may not take this course.

205 - Intensive Intermediate French (6) Prerequisite: FREN 102 or equivalent. Grammar review, reading, composition, laboratory use, oral work. Students who have taken French 201 are not eligible to take this class. Students with credit for a higher level course in French may not take this course.

## 311 - Composition (3)

Prerequisite: FREN 202. Advanced grammar, composition, reading.

## 312 - Oral Communication and Phonetics (3)

 Prerequisite: FREN 202. Oral skills, phonetics, listening comprehension, conversation.313 - Business French (3)
Prerequisite: FREN 311 or 312 . Especially designed for those who may be connected with businesses dealing in and with France or French-speaking countries.

## 315 - French Culture I: From Medieval to

 Modern France (3)Prerequisite: FREN 311 or 312, or permission of the instructor. The intellectual, political, economic, and social developments of France from the medieval to the modern periods.

316 - French Culture II: Contemporary Issues (3)

Prerequisite: FREN 311 or 312, or permission of the instructor. France's intellectual, political, economic, and social developments since World War II.

## 319 - French Cinema (3)

Prerequisite: FREN 311 or 312, or permission of the instructor. A study of the major movements of French cinema, including silent films, surrealism and the Avant-Garde, films of the Occupation, the New Wave, the "cinema du look," neo-realism, and films that have come to be described as postmodern and postnationalist.

## 320 - Topics in French Art, Literature, and

 Culture (3)Prerequisite: FREN 311 or 312, or permission of instructor. French and Francophone literature and culture. Topics will vary.

326, 327, 328 - Survey of French Literature I, II, III ( $3,3,3$ )
Prerequisite: FREN 311 or 312. A chronological study of French literature from the medieval period through the late 20th century.

342 - Medieval and Renaissance Literature (3) Prerequisites: Two segments of the literature survey, or permission of the instructor. Selections from such genres as the medieval courtly lai and popular fabliau through the 16th century nouvelle.

351 - Seventeenth-Century Literature (3) Prerequisites: Two segments of the literature survey, or permission of the instructor. Corneille, Moliere, Racine, and other representative works.

361 - Eighteenth-Century Literature (3)
Prerequisites: Two segments of the literature survey, or permission of the instructor. Philosophy, fiction, and theatre.

371 - Novel of the Nineteenth Century (3) Prerequisites: Two segments of the literature survey, or permission of the instructor. Stendhal, Balzac, Flaubert, Zola, and short stories.

381 - The Novel of the Twentieth Century (3) Prerequisites: Two segments of the literature survey, or permission of the instructor. Proust, Robbe-Grillet, Sarraute, Camus, and other representative works.

382 - Twentieth-Century Theater (3)
Prerequisites: Two segments of the literature survey, or permission of the instructor. Artaud, Ionesco, Jarry, Beckett, and other representative works.

## 383 - Francophone Literature (3)

Prerequisites: Two segments of the literature survey or permission of the instructor. Representative works from the Maghreb, subSaharan Africa, the Caribbean, Quebec and French Beur literature.

411 - Stylistics (3)
Prerequisites: FREN 311, 312, and two segments of the literature survey. Analysis and practice of written French styles.

412 - Translation (3)
Prerequisites: FREN 311, 312, and two segments of the literature survey. Translation theories and techniques.

481 - Senior Seminar (3)
Selected topics. Required of and limited to senior majors.

491, 492 - Individual Study (3, 3)
Intensive study of one or more authors selected in consultation with instructor. By permission of the department.

499 - Internship (Credits variable) Supervised off-campus experience, developed in consultation with the department. No credit toward major or minor.

## GEOGRAPHY

Department of Geography

Jacqueline Gallagher, Chair<br>Joseph W. Nicholas, Career Advisor

## Faculty

Professors
Dawn S. Bowen
Stephen P. Hanna
Farhang Rouhani
Associate Professors
Jacqueline Gallagher
Joseph W. Nicholas
Melina A. Patterson
Brian R. Rizzo
Assistant Professors
Caitlin C. Finlayson
Ping Yin

## The Geography Program

The Geography Department hosts two programs, a traditional major program and a certificate program in Geographic Information Science. In the major program, students study the interactions between people and their environments, both human and natural. Geographers examine the places and regions resulting from such interactions and analyze the spatial characteristics of all manner of natural, cultural, economic, and political processes and relationships. The Geography program at Mary Washington has three areas of emphasis:

## Community, Development, and Culture:

A focus on how people living in specific places and regions experience and affect social, cultural, economic, and environmental processes. Includes course work in planning and urban geography, local and international development, race and place, humanenvironment relationships, and regional geographies.

## Globalization:

A focus on the geographies of globalization and its political, cultural, and economic dimensions. Includes course work in geopolitics, economic and cultural globalization, international development, migration, and regional geographies.

## Nature and Society:

A focus on the physical and social processes that shape the natural environmental and
affect human life. Includes course work in landforms, climatology, human-environment relationships and regional geographies.

All geography majors acquire spatial thinking skills by studying research methods appropriate for their area of emphasis. These include: geographic information systems (GIS), cartography, remote sensing, field methods, and qualitative methods. Majors are also encouraged to engage in internships, study abroad programs, and undergraduate research.

The facilities for geographic studies at Mary Washington include well-equipped laboratories for the study and practice of physical geography, GIS, cartography, and remote sensing. The department hosts a chapter of Gamma Theta Upsilon, the International Geography Honorary Society.

## Requirements for the Geography Major

 A minimum of 35 credits in Geography, Geographic Information Science, and related disciplines, including no more than two courses not designated GEOG or GISC
## 1) Introductory Courses

GEOG 101 or 102 (3 credits), and GEOG 110 AND 111 (8 credits). GEOL 112 can substitute for GEOG 111.

## 2) Intermediate Course

One course in geography ( 3 credits) chosen from GEOG 200 - GEOG 249. These will be chosen by the student in consultation with her/ his academic advisor to reflect the student's area of emphasis.

## 3) Research Methods

Two courses in methods and techniques (6-8 credits), at least one of which must be either a GEOG or GISC course, and at least one of which must be at the 300 level. Students may choose from GEOG 250, 252, 340, 351, 355, 363, 365; GISC 200, 351. ANTH 298, SOCG 364 , or 365 may substitute for one geography methods course.

## 4) Advanced Courses

Two courses in geography ( 6 credits) chosen from GEOG $300-339,360,410,485$, or 491. These will be chosen by the student in consultation with her/his academic advisor to reflect the student's area of emphasis.

## 5) Senior Seminar

GEOG 490 (3 credits), usually taken during the Fall semester of the senior year, is the required capstone to the major.

## 6) Electives

Two additional courses (6-8 credits), one of which must be at the 300 or 400 level, chosen by the student in consultation with her/his academic advisor to reflect the student's area of emphasis. Any geography course or approved course in related fields fulfills this requirement.

## Certificate in Geographic Information Science (18-24 credits) The Geography

 Department hosts an interdisciplinary certificate program in Geographic Information Science. Open to students in all majors and to non-degree seeking students, the program is designed to address the growing demand for GIS-trained personnel in business, government, education, health care, and numerous other settings. The field encompasses integrated hardware, software, and database systems that are capable of capturing, storing, analyzing, and displaying geographical information. Upon completion of the certificate, students may be eligible to apply for an additional professional certification in GIS administrated by the GIS Certification Institute (GISCI).
## Certificate Requirements:

1) Introductory Course (1 course)

GISC 200 or GEOG 250 or EESC/GEOL 205
2) Intermediate Course

GISC 351 or GEOG 351 (4 credits)
3) Programming Course

GISC 450 (4 credits)
4) Elective

Students must choose one elective from the following list: GEOG 340, GEOG 355, GISC 440, GISC 460, GISC 471 (4 credits)

## 5) Capstone Experience

To earn the certificate, students must complete either GISC 491 or GISC 499. All directed studies and internships must be approved by the Director of GIS Programs. (3-6 credits)

[^2]the Catalog while the course description for EESC/GEOL 205 is on page 127. All GISC course descriptions are on pages 228-229. Students with professional experience in GIS may have a maximum of one course or four credits waived with appropriate approval, but must take additional course credits to total 18 hours. Consult with Dr. Brian Rizzo (GIS program advisor) for additional information.

## Academic/Continuance Policies for the Certificate in GIS:

A maximum of two approved courses (3-8 credits) may be transferred from another regionally-accredited institution to meet certificate program requirements. All classes for the certificate must be completed within a four-year period following matriculation into the certificate program.

Students must maintain an overall 2.5 gradepoint average in certificate program courses, or have permission from the faculty advisor, prior to registering for the final directed study or internship course. Students may be required to meet with an advisor for an annual review of progress and a summary review at the completion of course work.

## Geography Course Offerings (GEOG)

101 - World Regional Geography (3)
An appreciation of spatial patterns in the distribution of physical and human characteristics of the major regions of the world.

102 - Introduction to Human Geography (3) An examination of the political, economic, and cultural processes that shape the distribution, spaces, and places of contemporary societies.

110 - Introduction to Weather and Climate (4) Foundational concepts of physical geography. Concentration on weather, climate, and world vegetation regions. Laboratory.

111 - Landform Processes (4) Prerequisite: GEOG 110. Survey of the processes, both tectonic and climatic, that shape the earth's surface. Laboratory.
200 - Topics in Geography (variable 1-4) Lecture class dealing with a pre-selected topic of current interest. May include laboratory. (May be repeated for credit with change of topic)
221 - Geography of Eastern North America (3)
Regional geography of the eastern United

States and Canada, stressing similarities and differences in land, life, and livelihood.

222 - Geography of Western North America (3) Regional geography of the western United States and Canada, stressing similarities and differences in land, life, and livelihood.

231 - Introduction to Planning (3)
A survey of basic concepts, laws, and methods used in city and regional planning, illustrated with case studies.

## 236-Globalization and Local Development (3)

Analysis of the history and current conditions of the world-economy focusing on local-global relationships and on the roles of technological change, the state, and transnational corporations in explaining the geographies of globalization.

## 237 - Cities (3)

An exploration of the complexities and contradictions of city life and urban processes. Includes an introduction to debates about the economic, political, environmental, and cultural roles and meanings of cities and instruction in basic research methods used by urban researchers.

## 240 - Natural Hazards (3)

Prerequisite: GEOG 110 or permission of instructor. The study of natural hazards from a geographic perspective including physical processes, risk factors, and the vulnerability of populations in both more and less developed countries.

241 - Biogeography (3)
Prerequisite: GEOG 110 or permission of instructor. This course introduces biogeography, the study of the distribution of organisms through space and time, the patterns created by those distributions, and the reasons for them.

## 245 - Environment and Society (3)

A geographic survey of environmental changes caused by human activities, with emphasis given to resource exploitation, conservation, pollution, and interactions of humans with plant and animal communities.

250 - Introduction to Geographic Information Systems and Cartography (4)
An introduction to the principles of GIS and cartography and their use in presenting and analyzing geographic information. Laboratory.

252 - Introduction to Quantitative Methods in Geography (3)
Prerequisite: 6 hours of GEOG or permission of instructor. An introduction to the quantitative methods used by geographers to analyze and interpret geographic data and solve geographic problems. Includes descriptive and inferential statistics, and an exploration of how quantitative research questions and techniques are situated within the broader discipline of geography.

## 301 - Geography of Latin America and the Caribbean (3)

Regional geography of the lands and peoples of Latin America and the Caribbean, with particular emphasis on the cultural, political, economic and historical bonds that unify the region.

## 304 - Geography of the Middle East (3)

An examination of the Middle East in the world including the political, cultural, social, and economic processes that orient perceptions of and in the Middle East.

305 - Geography of Sub-Saharan Africa (3) A study of Africa south of the Sahara, focusing on the political, economic and social development of the region.

## 307 - Geography of Asia (3)

A survey of the human and physical geography of Asia with emphasis on the cultural, economic, and political conditions within Asia and the region's relationships with the rest of the world. The course will often focus on one of Asia's subregions.

## 325 - Dynamic Climatology (3)

Prerequisite: GEOG 110 or permission of instructor. A study of the atmospheric dynamics that control earth's climates.

326 - Glacial Processes and Landscapes (3) Prerequisite: GEOG 111 or GEOL 112. An investigation into glacial processes and the landforms associated, both directly and indirectly, with glaciation. One weekend field trip may be scheduled.

## 327 - Climate Change (3)

Prerequisite: GEOG 110 or GEOL 111. An examination of the mechanisms and evidence for climate change over various timescales.

331 - Race and Place in America (3) An analysis of how place and space have shaped our understandings and experiences of race in the United States. Topics include
segregation, white supremacy groups, immigration, and how law has interpreted racialized geographies.

## 332 - Migration Politics in a Globalizing World (3)

An examination of the politics of movement and mobility in international migration and of the spaces created by interactions between migrants, governments, and residents.

## 333 - Regional Planning Seminar (3)

Prerequisite: GEOG 231 or HISP 209. An examination of planning issues at the regional scale. Topics include the historical foundation of regional planning, the political and economic relationships between the suburban and urban jurisdictions, and the opportunities and obstacles involved with implementing the regional coordination of transportation planning, environmental planning, and economic development.

335 - Sacred Spaces (3)
An examination of the intersection of geography and religion with an emphasis on sacred spaces. The course explores how religions understand, create, and give meaning to sacred space, and includes a review of major theories and methods in the geographic study of religion.

## 337 - The Nature of Cities (3)

Prerequisite: GEOG 237 or permission of instructor. Examination of the multiple intersections between cities and nature, including the environmental explanations for the location of cities, the role of green spaces in cities, ecological models of cities and environmental justice issues.

## 338 - Geopolitics (3)

Prerequisite: Junior or Senior status. An analysis of power, ideology and identity in and across space. The class focuses on how geopolitical theories have changed over time and vary across places and introduces students to critical geopolitics.

339 - Geography and Development (3) An examination of local and global geographies of uneven development, including a review of major theories and introducing a spatial approach to cultural, economic, political, and environmental problems of uneven development.

340 - Remote Sensing and Air Photo Interpretation (4)
Prerequisite: GEOG 250 or EESC 205 or GISC 200. Analysis of remotely-sensed images with emphasis on the interpretation of aerial photographs and the use of imagery in geographical research. Laboratory.

## 351 - Spatial Analysis with GIS (4)

 Prerequisite: GEOG 250 or EESC 205 or GISC 200. Concepts and applications of geographic information systems (GIS). Emphasis on the use of GIS as a method for analyzing and solving geographic problems. Laboratory.355 - Mobile Geographic Information Systems and Global Positioning Systems (4) Prerequisite: GEOG 250 or EESC 205 or GISC 200. Concepts and techniques of field mapping using Mobile GIS and GPS, including data collection and analysis. Detailed study of technology and applications of global positioning systems. Requires fieldwork. Laboratory.

360 - Geographic Study Abroad (variable 1-6) Travel to a foreign region where students will attend lectures, observe geographic phenomena, and participate in group discussions.

363 - Qualitative Methods in Geography (3) An examination of the philosophies and techniques of doing qualitative research in geography. Includes data collection and analysis using interviewing, observation, participatory research, visual techniques, cognitive mapping, archival research, and content analysis.

## 365 - Field Methods in Geography (4)

Prerequisite: 18 hours in Geography. Methods of systematic observation, survey design, interview techniques, mapping, writing reports based on field experience, and exploratory trips to a variety of locales.

410 - Advanced Topics in Geography (variable 1-4)
Advanced seminar dealing with a preselected topic of current interest. May include laboratory. (May be repeated for credit with change of topic)

485 - Readings in Geography (variable 1-3)
Prerequisite: Permission of the instructor. Directed readings on a selected topic in geography under the guidance of a member of the geography faculty.

490 - Senior Seminar in Geography (3) Prerequisite: Senior majors only. An intensive study of one of the subfields of geography, with emphasis on critical reading of the literature and group discussion.

## 491 - Individual Study in Geography (variable 1-6)

Prerequisite: Permission of the instructor. Intensive individual research of some geographic issue under the guidance of a member of the geography faculty.

## 499 - Internship (variable 1-6)

Prerequisite: Permission of the instructor. Supervised off-campus experience. Pass/fail only. Does not count toward geography major.

## Geographic Information Science (GISC)

 200 - Introduction to GIS (4) Introduction to GIS focuses on the theory and application of GIS technology. The course combines theory and laboratory assignments in an effort to provide students with the knowledge required to plan and undertake a project that has a GIS component. The course uses ArcGIS for practical laboratory work and to illustrate theoretical concepts. There are three main components to the course. The first focuses on a brief introduction of GIS, the nature of geographic data, map projections and data integration. The second deals with the various types of spatial data and the tools, technology, and utilities available to work with spatial data. The third focuses on the various forms of spatial data, vector and raster, and their associated extensions and tools.
## 351 - Spatial Analyses, Data Models, and Modeling (4)

Prerequisite: GISC 200 or GEOL/EESC 205 or GEOG 250 or permission of instructor. This course develops hands-on skills with industrystandard GIS software beyond the level acquired in the introductory courses GISC 200, GEOL/ EESC 205, and GEOG 250. Students complete assignments in a wide variety of applications, including urban infrastructure management, environmental modeling, and demographic analyses. The course focuses on GIS as an analytical research tool. Upon completion, students have a thorough understanding of the various forms of spatial data and an understanding of their structure. In addition they convert and integrate data in ArcGIS, create GIS layers (themes) in multiple formats, conduct geographic analyses, customize software applications through scripts, and draw
and present conclusions and results. Students also have the necessary skills to independently complete a GIS project including establishing objectives, reviewing literature and/or practices elsewhere, and identifying, acquiring, editing, correcting, and modifying GIS layers. Students are introduced to alternative GIS applications providing a broader perspective of applications that are used in industry.

## 440 - Application of Spatial Statistics and Models in GIS (4) <br> Prerequisite: GISC 351 or GEOG 351. This

 course focuses on the application of statistics and quantitative methods in GIS. It emphasizes the development of statistical methodology appropriate for analyzing spatial data, modeling spatial relationships, and exploring data within ArcGIS.450 - GIS Programming (4)
Prerequisite: GISC 351 or GEOG 351. This course teaches the fundamental concepts of computer programming, OOP concepts, and ArcObjects. Students are introduced to ArcObjects libraries for Visual Basic Applications and develop custom applications and solutions that extend core ArcGIS functionality to build GIS applications. Students learn to apply object-oriented programming concepts as they develop VBA resources to create applications and tools that perform specific GIS tasks as map navigation, feature selection and rendering. Course includes hands-on programming exercises, where students write code that exposes them to many ArcGIS tasks and commonly used ArcObjects.
460 - Designing Geodatabases (4)
Prerequisite: GISC 351 or GEOG 351. This course presents a theoretical study of the concepts of geodatabase modeling, including datasets, domains, relationships, spatial rules, and map layers. A methodology for building geodatabases is discussed. Case studies are used to evaluate existing geodatabase designs and implementations. The importance of industry standards is emphasized throughout the course. Lab exercises are used to build geodatabases and provide students with practical applications of the uses for geodatabases in the public and private sectors.

## 471 - Special Topics (3-6)

Prerequisite: Permission of the instructor. Advanced course in Geographic Information Science. Topic selected in advance by instructor.

491 - Directed Study (3-6)
Prerequisites: GISC 200, GEOG 250 or GEOL/ EESC 205 and permission of instructor. Intensive individual research using GIS under the guidance of a faculty member. Must be taken during the last semester or summer session of a student's program.

499 - Internship (3-6)
Prerequisites: GISC 200, GEOG 250 or GEOL/ EESC 205 and permission of instructor. Internships offer students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training. Interested students should contact the GISC program director for additional internship information.

## GEOLOGY

## Department of Earth and Environmental Sciences

Charles E. Whipkey, Chair
Jodie L. Hayob, Career Advisor

## Faculty

Professors
Jodie L. Hayob
Neil E. Tibert
Grant R. Woodwell
Associate Professors
Ben O. Kisila
Charles E. Whipkey
Assistant Professor
Melanie D. Szulczewski
Lecturer
Sarah A. Morealli

## The Geology Program

Geology is the scientific study of the Earth, including its composition, dynamics, surface processes and history. Our Geology major provides broad training in a diverse range of courses appropriate for students interested in pursuing a professional career or graduate studies in the earth sciences and related fields. The program also provides part of the necessary background for teaching the earth sciences. Because geology is an interdisciplinary science, students are encouraged to add courses from other fields. For example, students interested in paleontology are advised to take appropriate biology classes, whereas courses in chemistry and physics are important in disciplines such
as seismology, geochemistry, hydrology, and studies of energy and mineral resources.

The Environmental Geology major is designed for students with a specific interest in Earth's surficial processes, especially as they relate to human interaction with the landscape and environment. Environmental geology, therefore, examines topics such as hydrogeology, soil and water chemistry, and geomorphology that lie at the interfaces of the lithosphere, the hydrosphere, and climate system.

Students majoring in geology or environmental geology are encouraged to do independent study and research during their senior year. Financial support for student research is available. Qualified students may also choose to do an internship with a professional agency during either their junior or senior year. Students with a 3.00 overall grade-point average and a 3.25 average in geology courses may pursue Honors in Geology or Environmental Geology by completing an independent research project and writing and defending a thesis.

The Department has modern and wellequipped laboratories in the Jepson Science Center equipped with advanced analytical instruments to support and reinforce classroom instruction and to provide opportunities for research. Major equipment items include petrographic microscopes (one with a fluidinclusion stage), an x-ray diffractometer, a magnetic susceptibility instrument, and lab facilities for paleontology, sedimentology and geochemistry. The Jepson Science Center has a variable pressure scanning electron microscope with chemical capabilities that is shared by the science disciplines. For geological fieldwork, the department has GPS equipment, access to several boats, a core drill, surveying equipment, sediment corers, and for classroom study, an extensive collection of rocks, minerals, and fossils. The department also maintains a computer lab/classroom equipped with the latest Geographic Information Systems (GIS) software.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197, GEOL 491, GEOL 493, or GEOL 499. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus summer research experience developed in consultation with department (such as the UMW Summer Science Research Program or a similar program
at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details..

## Requirements for Geology Major

Forty (40) credits, to include Geology 111, 112, $240,301,302,311$, and 412; and an additional twelve (12) credits in other geology courses including Geology 201, 205, 210 and 211 (must be taken concurrently and count as one elective) or other geology courses at the 300level and above. Chemistry 331 or 332 may be substituted for up to four (4) of these credits. Environmental Science 307 and 493 may also be included for geology elective credit.

## Requirements for Environmental Geology Major

Forty-one to forty-four (41-44) credits, to include Forty-one to forty-four (41-44) credits to include Chemistry 111 and 112, Geology 111, 112, 240, 301, 311, and 315, and either Geology 205 or Geography 250 or Geographic Information Science 200. In addition, choose two elective courses from the following: Geology 210 and 211 (210 and 211 must be taken concurrently and will count as one elective), $313,325,340,360,412,493$; Environmental Science 307, 326, 330, 493.

## Geology Course Offerings (GEOL)

 111 - Introductory Geology (4) Introduction to the Earth: topics include mineral and rock composition of the crust and mantle, plate tectonics, earthquakes and volcanoes. Laboratory. Entry-level course.
## 112 - Evolution of the Earth (4)

Prerequisite: GEOL 111 or EESC 110. History of the Earth with emphasis on surficial processes, evolution of life, the hydrologic cycle and climate change. Laboratory.

201 - Paleontology (4)
Prerequisite: GEOL 111 or BIOL 121. This course introduces the fundamental procedures and applications of paleontology that include taxonomy, taphonomy, biostratigraphy, paleoecology and environmental science. The course format is project oriented with student opportunities to collect, describe and analyze fossil specimens retrieved from rock samples and sediment cores. The lab will provide a survey of the major fossil groups and introduce modern analytical procedures. Laboratory.

205 - Computer Applications in Environmental Science and Geology (3) This course emphasizes the acquisition of spatial data and their display and analysis within ArcGIS geographic information system software. The class also includes an introduction to the use of global positioning system instruments for data collection. Crosslisted as EESC 205.

## 210 - Oceanography (3)

Prerequisite: GEOL 111. An introduction to the oceans. Physical and chemical processes affecting seawater; the geology of the seafloor; biological productivity in the oceans; and environmental challenges involving the oceans. Cross-listed as EESC 210.

211 - Oceanography Laboratory (1) Corequisite: GEOL/EESC 210. Laboratory investigation of the chemical and physical properties of seawater; the tides; bathymetric measurements; coastal navigation; and marine biological processes. One or more field trips may be scheduled. Cross-listed as EESC 211.

## 221 - Environmental Geology (3)

Prerequisite: GEOL 111. Interaction of geologic phenomena and processes with society and the biosphere.

## 240 - Field Methods in Environmental Science and Geology (4)

Prerequisites: GEOL 111 or EESC 110 or GEOG 110. The Earth \& Environmental Sciences rely heavily on mapping and collection of physical, chemical, and biological field data. Student enrolled in the course will complete weekly laboratory and hands-on exercises to learn the essential field skills necessary to advance their careers in the earth sciences as technicians, academics, and/or educators. This introductory field course will provide a solid foundation to prepare students for advanced earth science study and/or a general introduction to the field methods within the discipline. Cross-listed as EESC 240.

301 - Mineralogy (4)
Prerequisite: GEOL 111 or EESC 110; prerequiste or co-requiste CHEM 111. Study of Earth's major rock forming minerals, and those of economic value, in hand sample, microscopic thin section and through field studies. Course is conducted as a mix of lecture and laboratory activities. Laboratory.

302 - Petrology (4)
Prerequisite: GEOL 301; prerequisite or

Corequisite CHEM 112. Study of metamorphic and igneous processes and important rock types in hand sample, microscopic thin-section and through field studies. Course is conducted as a mix of lecture and laboratory activities. Laboratory.

311 - Sedimentation and Stratigraphy (4) Prerequisite: GEOL 111; prerequisite or Corequisite CHEM 111; recommended: GEOL 301. This course provides an overview of the concepts associated with sedimentary rock formation, including theoretical sedimentology, process oriented facies analysis and applied stratigraphy in the context of cyclic sea level and climate change through time. Class work includes several field trips to collect samples for physical and chemical analysis. Laboratory.

## 313- Fluvial Geomorphology (4)

Prerequisites: GEOL 112 or GEOG 111. Use of both classical (qualitative) and modern (quantitative) geomorphological methods to study and understand fluvial processes acting on the surface of the earth, and how landforms and landscapes created by these processes control the global environment. The class will combine field-based observations with in-class instruction. Laboratory.

315 - Hydrogeology (4)
Prerequisite: GEOL 112. An introduction to surface water and groundwater flow; the hydrologic cycle; aquifer testing; flow to wells; contaminant transport; and field and laboratory instruments. Cross-listed as EESC 315. Laboratory.

325 - Environmental Geochemistry (4) Prerequisites: GEOL 112 and CHEM 112. Study of chemical processes operating at or near the surface of the Earth, in bedrock, soils, streams, the oceans and the atmosphere. Particular attention is given to environmental applications. Cross-listed as EESC 325.
Laboratory.
335 - Plate Tectonics (4)
Prerequisite: GEOL 112. This laboratory course offers a comprehensive study of lithospheric plate movements using information derived from seismology, paleomagnetics, petrology and tectonics. Selected topics also include a historical review of the development of the theory of plate tectonics, geologic and geophysical events at plate boundaries and an evaluation of evidence regarding plate-driving forces. Laboratory.

340 - Energy Resources and Technology (3) Prerequisite: One from BIOL 132, 126, CHEM 112, GEOL 112, EESC 110 or PHYS 106. Intended primarily for science majors, this course investigates the basic science and technology relating to alternative energy sources and fossil fuels. Students who complete this class will have a greater technical understanding of energy sources and the methods used to tap them. Cross-listed as EESC 340.

355 - Icehouse - Greenhouse Earth (3) Prerequisites: GEOL 111 or EESC 110. This course examines the history of the Earth's climate system in the context of the two primary modes: Icehouse and Greenhouse. Through critical evaluation of primary literature, written assignments and oral presentations, students will gain an appreciation of the magnitude of temporal and spatial climate reorganizations through time and develop an in-depth understanding of both long and short term cyclic changes that have contributed to the development of our modern climate system. Cross-listed with EESC 355.

360 - Environmental Exploration (2-4) Specialized courses with a significant field component not offered on a regular basis. Study of selected environments along with relevant geological issues with a focus on active exploration and research. Overnight trips and extra fees required. Permission of instructor required to register. Cross-listed as EESC 360.

412 - Structural Geology (4)
Prerequisite: GEOL 301. Analysis and interpretation of structural features of the Earth's crust such as folds and faults. Laboratory.

421 - Advanced Topics in Geology (2-4)
Prerequisite: permission of the instructor.
Specialized topics not offered on a regular basis.

## 491 - Individual Study (1-4)

Prerequisite: permission of the instructor. Investigation of a topic which may include laboratory, field work and literature research. Course of study determined by supervising instructor and student.

493 - Honors Research (4)
Prerequisites: EESC 491 or GEOL 491 and permission of instructor. Independent research
project which may include field and/or laboratory work. Course of study determined by supervising research advisor and student. Successful completion of a written thesis and oral defense is required, and will result in the student earning departmental Honors at graduation.

## 499 - Internship (Credits variable)

 Prerequisite: Junior or Senior Geology major in good academic standing. Supervised off campus experience developed in consultation with the department. A maximum of three (3) credits may count toward the Geology major requirements.
## GERMAN <br> Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair<br>Marcel Rotter, Career Advisor

## Faculty

Associate Professor Marcel Rotter
Assistant Professor
Jennifer Hansen-Glucklich

## The German Program

Through courses in German, students gain linguistic proficiency, as well as understanding of the literatures and cultures of the Germanspeaking world. Electronic resources are used extensively to supplement classroom instruction. Upper-level classes are conducted in German.

Double majors are possible, and non majors may also take advantage of the language program. The resident program director of this area is a native speaker of German and sponsors various inter-cultural programs.

The Department of Modern Languages and Literatures cooperates with a variety of overseas study programs, advises and encourages students wishing to study abroad, and helps in planning their foreign study programs. Credits can be accepted from abroad to fulfill major requirements. UMW also offers programs in German-speaking countries of varying lengths, making it possible for students to study during spring break, summer or for a semester or year there.

Graduates in German may pursue careers in government or in private fields in which the
knowledge of this language and culture is essential, including interpreting, translating, research, social services, education, or international business.

## Requirements for the German Major

Thirty-two (32) credits in German including GERM 311; at least two courses chosen from 393, 394, and 395; and additional German courses at the 300 - or 400 -level and IDIS 350M.

## Business German Minor

The Business German minor is an interdisciplinary program of study that combines courses in German language and culture with selected courses in business and/or economics. The Business German minor provides the student with a basic understanding of business and economics as well as the ability to communicate about them in German in a professional context Students also include an internship as part of their minor programs. Approved German courses from study abroad programs may also be included among the electives of the Business German minor.

## Requirements for the Business German Minor

Twenty-six credits including: GERM 313; GERM 393;; GERM 394; GERM 317 or GERM 485b or GERM 485c; GERM 499 or BUAD 499 or ECON 499 (for at least 1 credit) and one of the following three-course combinations:
ACCT 101, ACCT 102, and one College of Business course on the 300 level or above OR

ECON 201, 202, and one ECON course on the 300 level or above. Business German minors can take no more than 29 credits in Business without declaring a Business major.

## German Minor

The German minor is designed to provide the student with an advanced level of language proficiency augmented by a basic knowledge and familiarity with the culture and literature of Germany. In addition to the minor's required German language courses or their equivalents, students are able to select 300 - and 400 -level courses in German culture, literature and applied language. Students may also include individual study (GERM 491, 492) and
three-credit internships (GERM 499) as part of their minor programs. Approved German courses from study abroad programs may also be included among the electives of the German minor.

## Requirements for the German Minor

Twenty-six credits including: GERM 201, 202, two courses from GERM $393,394,395$, 313 and any three additional courses ( 4 cr . each) at or above the 300 level. If the student can demonstrate intermediate language competency through one of the accepted exams and, consequently, does not have to take GERM 201 and GERM 202, he or she will replace those courses with additional courses at or above the 300 level.

## German Course Offerings (GERM)

101, 102 - Beginning German $(3,3)$ Grammar, emphasis on gaining rapid comprehension and developing fluency in spoken German. Introduction to reading German. Learning to write German. Students with credit for a higher level course in German may not take this course.

201, 202 - Intermediate German (3, 3) Prerequisites: GERM 102 or equivalent for 201; GERM 201 or equivalent for 202. Grammar review, concentration on reading for comprehension. Honing of oral skills and writing German. Readings in GERM 202 focus on global issues. Students with credit for a higher level course in German may not take this course.

## 301 - Study Abroad Reflection (1)

 Prerequisite: GERM 202 or equivalent. A reflection course for students of German to complete after returning from an approved study abroad program in Germany, Austria, or Switzerland.311 - Introduction to German Literature (4) Prerequisite: GERM 202 or equivalent. Emphasizes texts from the 19th and 20th centuries. Close attention paid to form, content, motifs, character analysis, and social and cultural background.

313 - Business German (4)
Prerequisite: GERM 393 or equivalent This course provides students with the basic communicative skills in the German language as used in German business and economics. It introduces students to the economic role of the German-speaking countries in the global economy. Topics include German economic
geography, German business and economics terminology in finance, the social welfare system, transport system, the structure of corporations, and the code of behavior in the business world. Students will develop their skills in listening comprehension, reading comprehension, speaking, and writing.

## 317 - German Civilization (4)

Recommendations: two German 300-level courses. Survey of the culture and civilization of the German-speaking areas, with emphasis on Germany.

## 385, 386 - German Literature of the Twentieth Century (4, 4)

Recommendations: two German 300-level courses. Representative authors such as Hofmannsthal, Mann, Kafka, Brecht, Böll, Frisch, Grass, Handke, Bachmann, Wolf, Arjouni.

## 393, 394, 395 - Advanced Grammar,

 Conversation, Composition (4, 4, 4)Prerequisites: GERM 202 must be completed before starting this sequence. German 394 is a prerequisite for 395 . Intensive written and oral language practice. Designed to expand the student's active vocabulary and help the student develop his or her own style. Emphasis on global issues in 394 and 395.

## 485 - Seminar in German (4)

Prerequisites: two German 300-level courses. Selected topics in German literature, German cultural studies, or Germanic linguistics.

491, 492 - Individual Study (1-6, 1-6)
Prerequisite: Approval of the instructor.
499 - Internship (1-6)
Prerequisite: Approval of instructor. Supervised off-campus experience developed in consultation with the department. No credit toward major.

## GREEK

Department of Classics, Philosophy, and Religion

Craig R. Vasey, Chair
Liane R. Houghtlain, Classics Career Advisor

## Faculty

Professor
Liane R. Houghtalin
Associate Professors
Angela L. Pitts
Joseph M. Romero

The study of ancient Greek is an appropriate complement to any major in the liberal arts or sciences, and any student may use Greek to satisfy the University's general education requirement for proficiency in a foreign language. While no specific major or concentration in Greek is offered, students may use courses in Greek to fulfill the requirements for a major in Classics. The University is a cooperating institution with the American School of Classical Studies in Athens, and students who study Greek are encouraged to apply to its program.

## Greek Course Offerings (GREK)

101, 102 - Elementary Greek (3, 3)
Essentials of ancient Greek grammar and introduction to translating Greek literature.

201, 202 - Intermediate Greek $(3,3)$
Prerequisites: GREK 101-102 or equivalent.
Readings in ancient Greek prose and poetry.
Prerequisite for all 300- and 400-level Greek courses: GREK 202.

306 - Homer (3)
Selected readings from the Iliad or the Odyssey.
308 - Tragedy (3)
Selected plays of Aeschylus, Sophocles, and/or Euripides.

309, 311 - Survey of Greek Literature I, II $(3,3)$ Survey of ancient Greek literature from the earliest surviving Archaic texts to the end of the Imperial era. May be taken in either order.

312 - Readings in Greek Philosophy (3)
Prerequisite: GREK 202. Selected readings from the ancient Greek philosophers.

451, 452 - Special Studies in Greek Literature (3, 3)
Reading and study of individual Greek authors or literary genres.

## 425 - Ancient Greek Tutoring Practicum (3)

Advanced students serve as tutors in introductory or intermediate level Greek classes. Permission of instructor.

491, 492 - Individual Study in Greek (1-3)
Individual study under the direction of a member of the staff. By permission of the department.

## HEALTH EDUCATION

Department of Athletics, Health and Physical Education

Ken Tyler, Chair

Health Education may be taken as an elective by any student.

Health Education Course Offering (HEED) 100 - Contemporary Health Issues (3) Provides up-to-date information about modern health problems confronting people of all ages. Discussion is encouraged to give students the opportunity to share personal experiences, resource materials, and problemsolving techniques. The impact of personal and environmental health problems on society is also covered.

## HISTORIC PRESERVATION

Department of Historic Preservation
Andréa D. Livi Smith, Chair
Michael G. Spencer, Career Advisor

## Faculty

Professor, Prince B. Woodard Chair Douglas W. Sanford
Associate Professor
Andréa D. Livi Smith
Michael G. Spencer, Director, Center for Historic Preservation
Assistant Professors
Christine R. Henry
Cristina Turdean

## The Historic Preservation Program <br> Historic Preservation focuses on the

maintenance, conservation, advocacy, and interpretation of historic sites and structures and on cultural resource management. Historic Preservation provides opportunities for students to gain a deeper and richer understanding of America's cultural and ethnic diversity and the ramifications of technological innovation and social change on people's quality of life.

Mary Washington was one of the first academic institutions in America to establish an undergraduate curriculum in historic preservation and the first to establish an independent Department of Historic Preservation - now one of the largest undergraduate program of its kind in the nation. The department offers an interdisciplinary major that acquaints students with a broad range of activities, methods, and theoretical perspectives. Students in the program may emphasize historic architecture, building forensics, folklore, archaeology, preservation planning, material culture, or museums in their course work.

Historic Preservation majors explore the theoretical, ethical, and philosophical issues that surround preservation practice. The acquisition of research and analytical skills is stressed and substantial fieldwork, laboratory, or research assignments are woven into most courses. The academic program of the department is strongly enhanced by the research and public education programs of the UMW Center for Historic Preservation.

The historic preservation program benefits by the location of the University in Fredericksburg, a city with an exceptionally rich history. Intellectual and professional skills are developed through intensive, hands-on involvement in preservation activities in the area, and opportunities exist for similar experience abroad. Students design and fabricate museum exhibits, carry out archaeology projects, conduct architectural surveys, and prepare diagnostic reports for local historic sites, structures and districts. Students interact with the local and University community through the activities of the student-organized Preservation Club. Special financial assistance is available for historic preservation students through a number of scholarships which are described within the Department's website: cas.umw.edu/hisp.

## Requirements for the Historic Preservation Major

Thirty-six (36) credits including HISP 101, 102, 200, 205, 207, 209, 305, 320, and 405; three credits from among 461, 462, 463, or 469; six credits from among 206, 208, $302,303,308$, $309,313,323,325,327,345,360,467,470,471$, 491, and GEOG 250. HISP 499 is strongly recommended but does not count toward requirements for the major.

## Historic Preservation Course Offerings (HISP)

101 - The American Heritage (3)
Survey of America's architectural, cultural, and historical resources; analysis of the historic, social, economic, political, and environmental forces from both "the Old World" and "the New World" which have shaped them.

102 - Preserving Historic America (3) Survey of the history of historic preservation and the practice of historic preservation with emphasis on the legislation, policies, and methodologies that form our present national, state, and local preservation system.

200 - Introduction to Museum Studies (3) Survey of the history, philosophy, and management of museums, including curatorship and public interpretation.

205 - Documentation and Fieldwork (3) Prerequisite: HISP 101. Methods of documentation and analysis of historic sites and structures through historical research, measured drawings and photographs.

206 - Introduction to American Folklore (3) General survey of the forms of folklore found in the United States in the twenty-first century along with the methodologies and theoretical perspectives used in the analysis of folk forms.

## 207 - American Archaeology (3)

Introduction to field and laboratory methods and interpretive issues of North American archaeology, with emphasis on historical archaeology.
208 - Introduction to Conservation (3) Overview of conservation as a specialized professional discipline, including the field's history, ethics, and common practices for documentation, stabilization, analysis, and treatment.

209 - Planning History and Practice (3) Introduction to the theories, methods and
practical applications involved in the field of planning at the state and local level.

## 302 - Preservation Law (3)

Prerequisite: HISP 102. Examination of the development and application of preservation law and policy in the United States, through the analysis of case law, legislation, and private techniques.

## 303 - Archives and Society (3)

Examination of the theory and practice of archival work, including the preservation, organization, and cataloging of manuscript collections.

## 305 - American Building (3)

Prerequisite: HISP 205. Intensive overview of the evolution of American building from early dwellings and towns to the glass and steel towers that dominate post-modern skylines. Special emphasis is given to building materials, technologies, and the development of structural systems.

308 - Cultural Resource Management (3) Prerequisite: HISP 102. Examination of how historic preservation services are provided in legal and contractual contexts within the public sector. Topics include resource assessment, organizational management, proposals and budgets, and ethics.

309 - Preservation, Landscape, and Land Use (3) Prerequisite: HISP 102. Survey of current land use issues and the impact on cultural resources.

## 313 - Museum Education (3)

Prerequisite: HISP 200 or ARTH 315. This course gives and introduction to the main theoretical and methodological approaches in the field of museum education, including learning theories, museum interpretation, and development of learner centered programs aimed at conveying knowledge and experience to museum visitors of all ages.

320 - American Forms and Values (3) Interpretation and analysis of material culture in pre-industrial and modern American societies, with emphasis on research perspectives and methods.

## 323 - Heritage Tourism (3)

Examination of contemporary, marketcentered approaches to Historic Preservation. This seminar explores the formulas of presentation and representation of heritage as attractions within the Tourism industry.

325 - Vernacular Architecture in America (3) Prerequisite: HISP 205. A seminar in the research models, methods and theoretical approaches used to study commonplace architecture in the United States.

327 - Analytical Archaeology (3) Prerequisite: HISP 207. Exploration of a selected series of archaeological topics at an advanced, analytical level. Incorporates an examination of how archaeological data are analyzed with respect to research objectives, theoretical concepts, and cultural interpretations. Class format based on student discussion and shared learning.

## 345 - Computer Applications in Historic Preservation (3)

Prerequisite: HISP 205. Introduction to the major applications of computer technology in Historic Preservation, including development of database structures, documentation using vector drawings, and the employment of three-dimensional modeling. Through projects that are specific to the practice of historic preservation students gain new means of documenting, interpreting and analyzing cultural resources.

## 360 - International Preservation (3)

 Prerequisite: HISP 102. Examination of the origins and programs of major international preservation organizations such as UNESCO, ICOMOS and ICCROM and a survey of international preservation practice and projects in countries around the globe.405 - Survey and Preservation Planning (3) Prerequisites: HISP 209 and 305. An intensive survey and research-based study of preservation planning, with emphasis on the identification and analysis of sites and structures in their geographical, historical, and socio-economic contexts.

461 - Laboratory in Building Forensics (3) Prerequisite: HISP 305. Examination of the fundamental principles of building forensics related to the effects of time, gravity, humidity, temperature and light on building materials. Fieldwork monitoring and analysis of deterioration in historic buildings, including masonry, wood, metal and coatings.

462 - Laboratory Methods in Archaeology (3) Prerequisite: HISP 207. Laboratory procedures for the processing, identification, analysis, and interpretation of artifacts, with emphasis
on quantitative analysis and collections management.

## 463 - Laboratory in Museum Design and Interpretation (3) <br> Prerequisite: HISP 200 or permission of instructor. Examination of the principles of museum exhibit design and interpretation, including participation in exhibit preparation.

467 - Field Methods in Archaeology (3) Prerequisite: HISP 207 or permission of the instructor. Fieldwork-intensive introduction to the techniques for sampling, excavating, recording, and interpreting archaeological sites. Summer only.

469 - Laboratory in Preservation Planning (3) Prerequisite: HISP 405. This laboratory course expands on the methods and information learned in HISP 405 by providing students with practical experience in preservation planning at the local level.

470 - Historic Preservation Abroad (3)
Introduces students to the historic resources and to the public and private systems for historic preservation in another country or international setting. Participants investigate principal preservation organizations, methodologies, and standards. Participants engage in intensive fieldwork and sponsored projects. Summer only.

471 - Special Studies in Historic Preservation (3)
Seminar on a topic in historic preservation.
491 - Individual Study in Historic Preservation (1-3)
Prerequisite: permission of the instructor. Intensive individual investigation of a significant research problem under the direction of a faculty member.

## 499 - Internship in Historic Preservation (Credits variable)

Prerequisites: HISP 101, 102, additional course work in Historic Preservation appropriate for the internship, and permission of the instructor. Field experience with a preservation- related institution or group outside the University. Does not meet major requirements.

## HISTORY <br> Department of History and American Studies

Bruce R. O'Brien, Chair
Jason R. Sellers and Steven E. Harris, Career Advisors

Faculty<br>Professors

Claudine L. Ferrell
Jeffrey W. McClurken
Bruce R. O’Brien
Allyson M. Poska
Associate Professors
Nabil S. Al-Tikriti
Porter R. Blakemore
Susan R. Fernsebner
Steven E. Harris
Krystyn R. Moon
Jess M. Rigelhaupt
Assistant Professors
Will B. Mackintosh
Jason R. Sellers

## The History Program

The History curriculum is widely diversified by topic and by approach and offers an extensive range of courses from ancient to modern times in American, Asian, European, and Latin American. The History major itself is distinctive for four courses that are particularly germane to student development of independent, critical judgment based on historical skills. The First-Year Seminars offer incoming students, particularly those who have completed AP courses, the opportunity to move quickly into the history major during their first year. The two-semester History Colloquium and Practicum are seminars typically completed during the sophomore or junior year that prepare majors in the critical evaluation of historical arguments, research and analysis of historical data, and historical writing. These courses are essential preparation for upper-level lecture courses and seminars and for the senior course Historical Research. This capstone course provides an opportunity to complete a historical research project working one-onone with a member of the history faculty.

An internship option enhances the program by granting credit for history-related, careeroriented work outside the classroom. The goal of the History program is to produce
graduates with a command of factual and conceptual knowledge of the past; the analytical methods that historians use to recover, research, and write about the past; the tools to create and produce materials in the digital age; and well-honed writing and speaking skills. Graduates of the history program go on to a wide range of careers in which the ability to understand and solve historical problems, and in which skills of independent, critical judgment based on historical knowledge, are useful. Because the practice of history requires the ability to analyze and communicate ideas clearly as well as to retain factual information, it is an ideal preparation for law school and for careers in business, public policy, government, and journalism.

Honors in History at Graduation requires a 3.5 grade-point average in the major and superior work in HIST 485, Historical Research, or 486, Historical Research Abroad.

Phi Alpha Theta, the national history honorary society, enriches the quality of the History program and offers opportunities to participate in social and educational activities.

## Requirements for the History Major

The history major requires completion of 36 credits: 6 credits from one of the survey sequences (HIST 121-122, or HIST 131-132, or HIST 141-142); HIST 297 and 298; 15 elective credits at the 200-level and beyond; 9 credits at the 400-level, 3 of which must be HIST 485 or 486 and 3 of which may be HIST 491. American Studies (AMST) 202 or 303 ( 3 credits total) may count as an elective in the History major with permission from the Department Chair. Internships (HIST 499) are encouraged but count as electives in the major only with permission from the Department Chair.

## History Course Offerings (HIST)

121 - Western Civilization I (3)
From ancient Near Eastern origins through classical Greece and Rome, the Middle Ages and the Renaissance and Reformation Era to the 17th century.

## 122 - Western Civilization II (3)

From the seventeenth century through the Age of Absolutism, the Enlightenment, and the French Revolution to the era of nationalism
and industrialism and the modernism of the 20th century.

## 131 - American History to 1865 (3)

The Age of Discovery and the Colonial Era through the American Revolution, nation building, the rise of the party system, slavery, and the Civil War.

132 - American History Since 1865 (3)
Reconstruction, the emergence of industrialism, the development of world power status through the World Wars, and post-1945 trends.

141 - Asian Civilization I (3)
Asian civilization from its origins in India, China, Japan, and other societies through 1500 AD. Emphasis on social, intellectual, and technological change in the development of the culture and history of the area.

142 - Asian Civilization II (3)
Asia in the modern era, 1500 AD to present, the age of Western expansion and penetration and the social, political, economic, and intellectual transformation of the 19th and 20th centuries.

190 - Great Lives: Biographical Approaches to History and Culture (3)
Examination of various historical and culture developments through the lives of notable individuals from ancient times to the present; specific lives change each semester and cover a wide range of areas of accomplishment

200 - Topics in History (3)
Listed in the Schedule of Courses, chosen according to timely interest.

201- First-Year Seminar in European History (3) Topical seminar for freshmen.

## 202- First-Year Seminar in American

History (3)
Topical seminar for freshmen.
297 - History Colloquium (3)
Prerequisites: HIST 121-122, 131-132 OR 141142 and major status. Introduction to what history is and what historians do with a focus on historiography speaking and writing.

## 298 - History Practicum (3)

Prerequisite: HIST 297. Introduction to what history is and what historians do with a focus on research speaking and writing.

300 - Topics in History (3)
Listed in the Schedule of Courses, chosen according to timely interest.

## 303 - The American South (3)

Slavery and the plantation system, rise of sectionalism, Civil War and Reconstruction, the era of segregation, and the civil rights movement.

304 - The Civil War (3)
Development of Southern nationalism and the Confederacy; emphasis on social, economic, and political as well as military aspects of the War.

305 - The American West (3)
Exploration of interactions among various peoples who have lived along the American frontier and/or the American "West."

307 - Native American History (3)
Overview of Native American experiences in North America, with a focus on the precontact era to the Battle of Wounded Knee in 1890; also addresses 20th-century and contemporary Native American experiences and issues.

308 - U.S. Labor History (3)
Study of work and labor in the United States; emphasis on economic, political, social, and cultural changes in work and the labor movement.

310 - U.S. Urban History (3)
History of cities and urban life in the United States from the colonial period to twentieth century.

## 311, 312 - History of Virginia $(3,3)$

First semester, English origins and colonial developments through the revolutionary era; second semester, Jeffersonian period to the present.

## 313 - African American History through 1865 (3)

A survey of the African American experience in the British colonies in North America and in the early United States from African roots through the Civil War, with a focus on the experience of both slaves and free blacks.

314 - African American History since Slavery (3)
A survey of the African American experience since emancipation in 1865; covers segregation and lynching, black nationalism, the Great Migration, and the civil rights movement.

315 - U.S. Immigration History (3)
Experiences of immigrants in the United States and the creation of ethnic identity from the colonial period to the present.

## 318 - The American Revolution (3)

Overview of the cultural, economic, political and social factors that fueled the movement toward rebellion and independence.

319 - The Early American Republic (3)
Cultural, social, political, and economic history of the period between the American Revolution and the Civil War.

## 320 - The Gilded Age (3)

Urbanization, industrialization, immigration, reform movements, and development in law, family, recreation, race, and labor from the Civil War to the turn of the 20th century.

321 - The Progressive Era (3)
A survey of the first quarter of the 20th century; covers reform efforts, and World War I, as well as developments in law, recreation, race, business, and labor.

## 322 - U.S. Environmental History (3)

This course considers interaction between human populations and their physical environments from early arrivals in North America through the 20th century, addressing the impacts of this exchange on both culture and nature.

## 323 - Colonial America (3)

This course considers how people of Native American, European, and African descent shaped and were shaped by colonial America's environment, social, cultural, and economic realms, and how those experiences changed between the 16 th and 18 th centuries.

## 325 - Technology and Culture (3)

Development of American technology and its relation to U.S. culture from the colonial period to the present.

326 - History of Manhood in the U.S. (3) Gendered history of men and masculinity in the United States from the colonial period to the present day.

327 - U.S. Women's History to 1870 (3) Significant cultural, economic, and political developments that shaped the lives of women in the United States from the pre-colonial period to the passage of the 15th Amendment.

328 - U.S. Women's History since 1870 (3)
Women in the United States from the passage of the 15th Amendment to the present.

## 329 - U.S. History and Film (3)

History of how motion pictures have portrayed the American past and how they have shaped views of the past.

331 - History of Ancient Greece (3)
Greek history from Mycenae and Homer to the Hellenistic kingdoms; emphasis on primary source criticism.

## 332 - History of Ancient Rome (3)

Mythic origins of the city to the barbarian invasions; emphasis on primary source criticism.

## 334 - Early Modern European Women's History (3)

Explores key areas of European women's lives, including family life, religion, sexuality, and witchcraft, from 1300 to 1700.

## 335 - The Renaissance (3)

Provides an in depth look at the intellectual, political, social and artistic developments in Europe known as the Renaissance.

## 336 - The Reformation (3)

Provides an in depth look at the religious, intellectual, and social developments of the 16th and 17th centuries.

341, 342 - Europe in the Middle Ages (3, 3) First semester, conversion of Constantine to the last Viking raids; second semester, Investiture crisis to the Italian Renaissance.

349 - History of the British Isles (3)
Ireland, England, and Wales from prehistory to the 20th century, emphasizing interaction of cultures in the British Isles and throughout the British Empire.

353, 354 - History of France (3, 3)
First semester, Gaul and the Franks to French Revolution and Napoleon; second semester, Restoration Era to de Gaulle.

356 - History of Germany (3)
From the early 19th century to the present, with emphasis on the era of Bismarck, World War I, the Weimar Republic, the Third Reich, and the Cold War.

357, 358 - History of Russia (3, 3)
First semester, Kiev, Muscovy, and Imperial Russia to 1856; second semester, the last Romanovs, Revolution, and Soviet Period.

360 - History of Spain (3)
The history of Spain and its political, economic, and social evolution.

361, 362 - History of Latin America $(3,3)$ First semester, native cultures, Spanish conquest, and colonial institutions; second semester, 19th and 20th centuries.

365, 366 - History of China (3, 3)
Social, political, and intellectual development from the earliest times to the present; emphasis on the rise of modern nationalism, Maoist period.

368 - Gender in Chinese History (3)
Examines changing meanings of gender in Chinese history from the late imperial period through to the present day (12th-21st c.), with particular attention to notions of family and everyday life, gender in popular culture, sociopolitical critiques, 20th century feminism and revolution.

371, 372 - European Diplomatic History (3, 3) First semester, development of the modern state system from the Thirty Years War to the middle of the 19th century; second semester, from the unification of Germany through the two World Wars to the Cold War.

375 - Military History (3)
The art of war and its impact on society from the 17th century to the present; analysis of military developments in terms of organization, technology, and strategy.
377 - The Second World War, 1939-1945 (3) In-depth study of the origins, conduct, and consequences of the war with emphasis on its political, diplomatic, economic, and military aspects.
380 - United States Since 1945 (3)
Emphasis on major issues of the postwar era, including the Cold War, McCarthyism, civil rights movement, Vietnam, black militancy, and feminism.

381 - Europe Since 1945 (3)
Cold War, national developments, the Common Market, colonial independence movements, and the collapse of the Soviet empire.

## 383 - Islamic Civilization I (3)

Traces the political, religious, cultural, and institutional aspects of Islamic Civilization and its spread through Eurasia and Africa from the seventh to 15th centuries.

384 - Islamic Civilization II (3)
Traces the major political, religious, social, and cultural developments that shaped the modern Middle East from the 15th to the 21st century.

385 - The Arab-Israeli Conflict (3)
Survey of the "Arab-Israeli Conflict" from the mid-19th century to the present.

386 - Modern Iraq (3)
Explores the historical development of Iraqi society from late Ottoman rule to the present day.

387 - Turkey from Empire to Republic (3)
This course covers the history of Modern Turkey and its transition as a society and political unit from an imperial Ottoman to a republican Turkish reality. While political, cultural, and religious topics are covered, the primary focus is historical, interrogating how Turkish society evolved in response to a series of domestic, regional, and international challenges in the past century and a half.

390 - The United States and Vietnam (3) Political, diplomatic, military, economic, and cultural study of Vietnam and of the United States' role in Indochina.

395 - U.S. History and Popular Culture (3) This course explores the history of the United States through the prism of popular culture. Topics include fashion, food ways, television, movies, and music.

396 - History of Sexuality in the U.S. (3) This course looks at the various ways in which Americans have imagined and practiced sexuality from the colonial period to the present. Because of the sweeping nature of this subject, this course will borrow from a variety of fields of inquiry, including the history of science, law, religion, queer studies, and feminism.

416 - American Legal History (3) Prerequisite: junior or senior status. A study of politics, society, and economics through the mirror of law. Covers such issues as property, the family, and the legal profession.
417 - American Constitutional History (3) Prerequisite: junior or senior status. Major cases, questions, and issues from the revolutionary period through the 20th century.
420 - The Great War, 1914-1918 (3)
Prerequisites: HIST 298 or 299 and junior or senior status. The war's origins, its political
and military leadership, the various land and sea campaigns, war poetry, the war's cultural legacy, the role of women, and peacemaking.

## 421 - Nazi Germany (3)

Prerequisites: HIST 298 or 299 and junior or senior status.. German history from 1933-1945, including Hitler's rise to power, the causes of the 1939 war, the campaigns of World War II, the Holocaust, war crimes, and continuing Nazi legacy.

## 426 - Nineteenth-Century American Families (3)

Prerequisites: HIST 298 or 299 and junior or senior status. U.S. family from the Revolution through the early 20th century comparing idealized to actual families by exploring regional, class, and ethnic differences.

427 - History of the Information Age (3) Prerequisite: HIST 298 or 299 and junior or senior status or permission of instructor. This seminar explores the history of communication, new media, and the digital age. It examines the social and cultural history of information production and consumption from cave paintings to the Internet, and from analog computational machines to handheld computers. Generally based in the history of the US, but, given the transfer of technology and the increasing ability of these technologies to transcend geographic regions, it ranges more widely as appropriate.

## 428 - Digital History (3)

Prerequisite: HIST 298 or 299 and junior or senior status or permission of instructor. The digital humanities history and new media and the creation of online historical resources.

431 - The World of Late Antiquity (3) Prerequisites: HIST 298 or 299 and junior or senior status. . The Mediterranean world in a period of military collapse, barbarian invasion, intellectual revolution, and religious ferment.

432- Ottoman Legacies (3)
Prerequisite: HIST 298 or 299 and junior or senior status. This seminar examines the Ottoman Empire's history from its formation in the late 13th century until its final dissolution in 1923. The seminar also explores how Ottoman historians think about, analyze, and interpret that past, along with the cultural legacies left behind by the empire throughout the Middle East and the Balkans.

435- Daily Life in Early Modern Europe (3) Prerequisite: HIST 298 or 299 and junior or senior status. The daily life of ordinary people in Europe during the early modern period (1350-1700), examining topics such as childbirth, literacy, disease, sexuality, and work.

## 440- History of the Book (3)

Prerequisite: HIST 298 or 299 and junior or senior status. History and evolution on books in western culture, from manuscript to print to electronic media.

## 441 - Oral History (3)

Prerequisite: HIST 298 or 299 or permission of instructor. Study of oral history methodology; explores how oral history and narration of the past generations distinctive information about people's lives and political, social and cultural change; students receive training in oral history methods for conducting and analyzing interviews.

## 444 - American Slavery (3)

Prerequisites: HIST 298 or 299 and junior or senior status. Slavery in America from its African origins to its demise during the Civil War.

## 449 - American Immigrant Experience (3)

 Prerequisite: HIST 298 or 299 and junior or senior status or permission of instructor. This research seminar allows students to explore the movement of peoples in and of the US from the colonial period to the present.451 - Anglo-Saxon England (3)
Prerequisites: HIST 298 or 299 and junior or senior status. . England from the fifth-century migrations of Angles and Saxons to the Norman Conquest.

457 - History of Conspiracy Theories (3) Prerequisites: HIST 298 or 299 and junior or senior status. Examines the origins and impact of conspiracy theory thinking from the late 18th century to the present in a comparative context with special emphasis on France, the United States, and Russia.

## 462 - Women in Latin America (3)

Prerequisites: HIST 298 or 299 and junior or senior status. Role of women in Latin American society from the pre-conquest period to the present.

466 - Cultural History of Late 20th Century China (3)
Prerequisites: HIST 298 or 299 and junior
or senior status. Explores the methods of cultural history while engaging in a study of the People's Republic of China and the four decades leading up to the turn of the twentyfirst century. Key realms of focus include visual culture, cinema, and fiction, as well as the themes of memory, identity, politics, and global capitalism.

## 468 - History of Stalinism (3)

Prerequisite: HIST 298 or 299 and junior or senior status. Examine Soviet state and society under Stalin with particular attention to Communist ideology, collectivization and industrialization, popular culture, the Great Terror, everyday life, and World War II.

## 471 - Special Studies in History (3)

Prerequisites: HIST 298 or 299 and junior or senior status or permission of the instructor. Topical Seminars. See Schedule of Courses each semester.

## 485 - Historical Research (3)

Prerequisites: HIST 298 or 299, senior status and faculty approval of research topic. Capstone research and writing course involving the in-depth investigation of a subject under close supervision by a member of the department.

486 - Historical Research Abroad (3)
Prerequisites: HIST 298 or 299, senior status and faculty approval of research topic. Capstone research and writing course conducted in foreign archives under close supervision by a member of the department.

## 491 - Individual Study (3)

Prerequisite: permission of the instructor. Individual investigation of a subject of historical significance, directed by a member of the department.

## 499 - Internship (Credits variable)

Supervised off-campus experience, developed in consultation with the department.

## HONORS PROGRAM

## Members of the Honors Program Committee

Kelli M. Slunt, Program Director and Department of Chemistry<br>John Broome, College of Education<br>Daniel Hirshberg, Department of Classics, Philosophy, and Religion<br>Lynn Lewis, Department of Biological Sciences<br>Jennifer Polack, Department of Computer Science<br>Gary N. Richards, Department of English, Linguistics, and Communication

## The Honors Program

The Honors Program is a university-wide undergraduate program designed to offer highly motivated and advanced students the opportunity to enhance their intellectual growth by engaging them in rigorous honors designated coursework, interdisciplinary seminars, strong internship experiences, extended research and creative projects, and community service that develops a community of learners. The program will offer courses that are small in size and that develop the intellectual potential of students through activities that:

- develop communication skills
- incorporate interdisciplinary focus
- include innovative pedagogy
- analyze their own and others' assumptions
- enhance research skills
- apply critical reading, writing, speaking, problem solving, and thinking skills that incorporate information literacy, and an appreciation of audience
- include greater breadth than non-honors course sections
- incorporate enrichment opportunities to students and faculty
- utilize flexible approaches that accommodate different learning styles
Most students entering the Honors program will do so upon admission to the university. Students are admitted to the Honors Program based on screenings by the admissions office including consideration of high school GPA, standardized test scores, and rigor of high school curriculum. However, others may
apply for acceptance after matriculation, during their first year. Such students must have a 3.2 overall UMW GPA or higher, a letter of application, and one letter of recommendation from UMW faculty. Students entering after matriculation will be required to successfully complete Honors First-year Seminar, the Project Design Seminar, the Capstone experience and the mentored service project, in order to be awarded University Honors. The 6 credit per year requirement and minimum of 8 co-curricular events before graduation will also apply to these students for those semesters in which they are part of the Honors program. Exceptions to these policies can be made by the Honors committee/ director in extraordinary circumstances.
Completion of the honors program requirements will be recognized at graduation and indicated on the transcript as "University Honors." Note that departmental Honors will continue to be distinct from the Honors program. Honors in each discipline will still be administered by academic departments based on requirements they determine (see individual departments for details).
All students in the program must complete a minimum of $\mathbf{6}$ credits per year of Honors work and maintain a cumulative GPA of 3.2 in order to remain in good standing.


## Student Learning Outcomes for the University Honors Program

Upon the completion of the honors program at Mary Washington, in addition to earning the appropriate credits for their degrees, students will be able to:

- evaluate carefully the relevance of disciplinary contexts when presenting a position using a methodology specific to the discipline of study
- apply interdisciplinary approaches to research demonstrating multiple disciplinary contexts to articulate the value of such study
- actively pursue independent educational experiences inside and outside of the classroom.
- articulate an appreciation of ethical behavior and the values of good citizenship and service.


## Honors Program Requirements.

Students are required to complete a minimum of 6 credits of HN course work a semester until all of the following requirements are completed:

Honors First-Year Seminar, HONR 100, FSEM100(HN), HIST 201(HN), or HIST 202(HN) (3 credits)

HONR 201 - Sponsored/mentored Service Project**

Honors designated coursework and/or contract based coursework ${ }^{* *}$ (5 additional courses)

Project/Research Design Seminar (1 course or experience)
Mentor First-Year Honors students
Capstone Honors Course OR Honors Project
(Thesis or Performance) in a discipline OR Interdisciplinary Project** (minimum 3 credits)

Honors Program leadership
Attendance at a minimum of 8 approved co-curricular events (at least one per semester)
${ }^{* *}$ must be pre-approved by the Honors
Director/Committee

## Honor Course Offerings (HONR)

100 - Honors First-Year Seminar (3)
The honors first-year seminar introduces students to the goals of the honors program, interdisciplinary studies, and liberal learning. Students will develop the intellectual skills necessary for critical thinking, writing, oral expression, and academic argument. Specific topics will be based on instructor background and interests. Fulfills the first-year seminar general education requirement.

201 - Honors Service Learning (1)
Supervised on-campus or off-campus mentored service learning project developed in consultation with the Honors Program Committee.

491 - Honors Individual Study (1-4)
Individual study under the direction of a faculty member.

Effective Fall 2015, all HONR 100 courses will be listed as FSEM 100 HN on the course schedule.

## List of HONR 100 topics approved for

 offering in 2015-16.Note: all of these topics may not actually be offered in the 2015-2016 academic year. Other topics may be developed.
Climate Change and Energy Resources
Creating the Political Mind
Equality in America
Everyone's a Little Bit Racist
Game Theory
Hitchcock Master of Suspense
Inequality and the American Dream Is Trying to be Happier as Futile as Trying to be Taller?
Mad Scientists, Bad Scientists and Evil Geniuses: The Complicated Relationship
between Science and Society
Part Play, Part Game
Sexuality in Southern Literature
Scientific Controversies in the Media
Shakespeare and Popular Culture
The Russian Novel
The Grail Legend
*Also note that HIST 201 or 202 or FSEM 100 courses that bear the HN designation in the course schedule also fulfill the HONR 100 requirement for honors students.

## INTERDISCIPLINARY

These courses, designed to illustrate the interrelatedness of human knowledge, are taught by faculty members from several disciplines.

## Interdisciplinary Course Offerings (IDIS)

101 -- Scientific Reasoning and Practices (3) This course will prepare students for success in a science lab course by developing critical thinking and scientific reasoning skills and by providing experience with laboratory experiments.

130 - Introduction to Sports Management (3) This course will examine all facets of Sports Management as they relate to the industry of sports; including topics such as the basic principles of management, marketing, law, finance, and ethics in sports. Student will be challenged to apply knowledge of sport management to solve basic problems faced by sport managers. The course will also introduce and explore an understanding of career opportunities in the field of Sports

Management. This is a core requirement for the Sports Management minor and a prerequisite for PHYD 330.

## 203 - Introduction to Ethnic Studies (3)

 This course introduces students to the study of ethnicity in the United States through analysis of the historical experiences of ethnic groups and examination of the origins, nature, dynamics, and complexity of ethnic identification and relations.
## 204 - International Cinema (3)

Study of the development of world cinema from the late nineteenth century to the present.

## 207 - History of Science (3)

Prerequisite: completion of any natural science course sequence. This course explores the history of science from its foundations with the Greeks to present day, branching the disciplines of biology, chemistry, physics, and geology. The evolution of scientific theories as well as competing theories is examined in light of the political, social, and religious climate of the day, The difficulties faced in the advancement of science are discussed in the context of the interdisciplinary underpinnings of the scientific disciplines.

## 230 - Sports Law (3)

This course is a study of the legal principles underlying business relationships in sports. This is a core requirement for the Sports Management minor. The course introduces law that affects sports and the business of sports including regulations of amateur athletics, public regulation of sport activities, legal relationships in professional sports, enforcement of professional sport contracts, liability for injuries, and anti-trust aspects of sport activities.

## 300 - Interdisciplinary Topics (3)

Topics offered under this heading are designed to supplement and enhance the programs of various departmental majors.

301 - Sport Psychology (3)
Prerequisite: PSYC 100. This course investigates the application of psychological principles to sport and sport performance.

[^3]component of STEM, engineering. Engineering and its associated design process provide the methodology for applying scientific and mathematical principles, as well as technology in developing and testing solutions to practical problems.

## 350 - Study Abroad (1-6)

Interdisciplinary study of a selected area abroad, combining lectures, readings, discussion, and experiential learning.

400 - Urban Research Seminar (3) Prerequisite: HISP 209 or GEOG 231 or GEOG 237 or permission of the instructor. Provides an opportunity to explore an urban issue in-depth and to conduct independent research related to urban studies. This class is the capstone course for students completing the Urban Studies minor and is open to other students only with the permission of the instructor.

407 - Field Project in STEM Education (4) Prerequisites: IDIS 307 and Senior class standing. This course provides the capstone experience for the Interdisciplinary Science Studies major. It is a project-based course, with the focus on the implementation of STEM concepts and principles in solving a practical, real-world problem.

491 - Individual Study (1-3)
Prerequisite: Permission of the instructor. This individual study is only available for students who have an approved Special Major Program. Individual investigation of a subject appropriate to the special major, directed by a member of the faculty. The registration form must be signed by both the directing faculty member and the official advisor of the student's special major.

499 - Internship (1-6)
Prerequisites: permission of the instructor and special major adviser. Supervised off-campus experience appropriate to the special major, directed by a member of the faculty, following guidelines set by the University for internships. Only available to students with approved special majors. Credits will count in the special major.

# INTERDISCIPLINARY SCIENCE STUDIES <br> Department of Earth and Environmental Sciences 

Charles E. Whipkey, Chair
Affiliated Faculty
Michael L. Bass, Department of Earth and Environmental Sciences Jodie L. Hayob, Department of Earth and Environmental Sciences Debra Hydorn, Department of Mathematics
Ben Odhiambo Kisila, Department of Earth and Environmental Sciences George Meadows, College of Education Marie Sheckels, College of Education Melanie D. Szulczewski, Department of Earth and Environmental Sciences Neil E. Tibert, Department of Earth and Environmental Sciences Grant R. Woodwell, Department of Earth and Environmental Sciences Gary N. Richards, Department of English, Linguistics, and Communication

This major is designed with the idea of creating a program of study that will best prepare a student to become a science educator. While this has been developed for students preparing to enter the teaching profession at the elementary level, it will also provide excellent preparation for those who might be interested in becoming science educators for museums, nature centers, aquariums, zoos, and a number of other fields as well. (Methods, approaches, and practices involved in teaching elementary age children science are provided through Education coursework.) The program has been developed to provide students with an in-depth exposure to one area of science, broad exposure to at least one additional area of science, a strong background in mathematics, and exposure to other areas that will strengthen their pedagogy (e.g. engineering/ design, museum studies, digital storytelling.)

## Requirements for the Interdisciplinary Science Studies Major

Course requirements include twenty-one (21) hours from Earth and Environmental Sciences, an eleven (11) or twelve (12), three course building sequence from a second science area (Biology, Chemistry, Physics, Geology,
or Computer Science). Additional required courses include MATH 120, IDIS 307 and 407, and CPSC 106.

Students enrolled in the Interdisciplinary Science Studies major will also take the undergraduate Education coursework required for students enrolled in the 5 -year, Master of Science (M.S.) in Elementary Education program.

## Interdisciplinary Science Studies Required Courses

CPSC 106; EESC 110, 230, 210 and 211 or GEOL 201, EESC 240, 340; GEOL 111; IDIS 307, 407; MATH 120.

# INTERNATIONAL AFFAIRS <br> Department of Political Science and International Affairs 

John M. Kramer, Chair and Career Advisor

Faculty<br>Distinguished Professor<br>John M. Kramer

## The International Affairs Program

The interdisciplinary major program in International Affairs is designed to provide the student with a broad knowledge of the contemporary international system as well as with specific expertise in a given geographic area and/or academic discipline. To this end, the major combines required courses that examine international affairs from a variety of disciplinary perspectives (i.e., economics, geography, history, and political science) with related field courses that permit students to pursue in depth their particular geographical and/or disciplinary interests. Students majoring in International Affairs have ample opportunities to pursue internships with the numerous governmental agencies and private "think tanks" located in Washington, D.C., which focus on different aspects of contemporary international economic, political, and social issues.

Career opportunities for the major in International Affairs range from such traditional areas as work with government or private agencies engaged in research on foreign policy or intelligence issues to such new and
rapidly expanding areas as employment with multinational corporations or international banking institutions.

## Requirements for the International Affairs Major

Thirty-nine (39) credits, to include PSCI 321, 350 or 351,356 ; ECON 382 or 384 ; HIST 371 or 372 ; GEOG 338 or 339 ; additional 21 credits to be chosen by student and advisor from among, but not limited to, the following disciplines: Economics, French, Geography, German, History, Italian, Political Science, Spanish.

## Additional Foreign Language Requirement:

 Option A - completion of two languages through the intermediate level. (Except Latin or Greek).Option B - at least six credits in one language at the advanced level. (Except Latin or Greek).

## Requirements for the Minor in Security and Conflict Studies

See the Political Science section of this Catalog (page 188).

## International Affairs Course Offerings (INAF)

471 - International Affairs Seminar (3) Intensive reading and group discussion of selected topics in international affairs.

491 - Individual Study in International Affairs (3)
Directed individual research on approved problems in international affairs.

499 - Internship (Credits variable) Supervised off-campus experience. Up to 6 credits can be applied to major.

## ITALIAN

Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair

## Faculty

Associate Professor
Federico Schneider

Through courses in Italian, students gain proficiency in understanding, reading, writing, and speaking this language. Laboratory
facilities are used extensively to supplement classroom instruction. Upper-level classes are conducted primarily in Italian. The program is complemented by courses on literature, culture, and civilization, some of which are taught in English, to give students with different backgrounds an opportunity to benefit from these offerings. Any student may use Italian to satisfy the University's general education requirement for proficiency in a foreign language. A special major in Italian Studies is possible for students who wish to make an application. Double majors are possible, and non-majors may also enter the language program. The Italian language coordinator is always a native speaker of Italy. Graduates in Italian Studies may pursue careers in fields in which knowledge of this language and culture is essential, including interpreting, translating, research, art history, music, fashion, design, historic preservation, and international business.

The University operates a four-week, summer study abroad program in Orvieto, Italy, and offers a semester exchange program at the Universita Cattolica di Milano.

## Italian Course Offerings (ITAL)

101, 102 - Beginning Italian (3, 3)
Grammar, composition, conversation, reading, laboratory use.

201, 202 - Intermediate Italian (3, 3)
Grammar review, reading, oral work, laboratory use.

291, 292 - Studies in Language (3, 3)
Reading, conversation, and composition in Italian with emphasis on communication and analysis of language through lectures and discussions.

300 - Topics in Italian Culture (3)
Important literary works and authors, ideas, movements, and institutions in Italian culture.

316 - Society and Civilization (3)
Literary, social, and cultural history of the Italian people from the Renaissance to the 20th century.

## 383 - Modern Italian Literature (3)

A study of modern Italian works, including selections from Ungaretti, Moravia, Carlo Levi, Buzzati, Silone, Pasolini, Calvino, and others.

395 - Italian Literature in Translation: Dante's Divine Comedy (3)
Taught in English. A thorough study of the Divine Comedy in its historical and cultural background.

396 - Italian Literature in Translation: Masterpieces of the Renaissance (3) Taught in English. A study of major Renaissance authors. Petrarch, Boccaccio, Cellini, Ariosto, Castiglione, Tasso, Machiavelli, etc.

491, 492 - Individual Study $(3,3)$ Intensive study of one or more authors selected by student in consultation with advisor.

499 - Internship (Credits variable) Supervised off-campus experience, developed in consultation with the department.

## LATIN

## Department of Classics, Philosophy, and Religion

Craig R. Vasey, Chair
Liane R. Houghtalin, Career Advisor

## Faculty

Professors
Liane R. Houghtalin
Joseph M. Romero
Associate Professor
Angela L. Pitts

The Latin Program The study of Latin is an appropriate complement to any major in the liberal arts or sciences, and any student may use Latin to satisfy the College's general education requirement for proficiency in a foreign language. Students wishing to major may choose a concentration in Latin within the Classics major. Mary Washington is a member of the Intercollegiate Center for Classical Studies, and students who major in Latin are encouraged to apply to its programs in Rome and Sicily; some financial aid is available.

While some majors include teacher licensure in their schedule, others combine their concentration in Latin with a second major in a related field such as history, philosophy, religion, English, business, or modern foreign languages. With such a background, graduates have a wide range of opportunities after college, including museum work, archaeology,
graduate study, teaching, and translating. In recent years, Latin majors have been unusually successful in obtaining high school teaching positions and in gaining admission to graduate and professional schools.

## Requirements for Latin Concentration in Classics Major

Thirty (33) credits including CLAS 103 and 105, LATN 430, at least fifteen (15) additional credits in Latin courses beyond the intermediate level, and at least nine credits in approved courses relating to Classical Civilization. Approved courses are any upperlevel Latin course, except LATN 425; any Greek course, except GREK 425; any Classics course; ARTH 114, 305, 310, 311; CPRD 299; CRPD 301, 302, 331 (all with permission); ENGL 319, 320; HIST 331, 332; ITAL 395, 396; PHIL 201, 310, 311; RELG 206, 211, 231 (with permission), 306, 331 (with permission), 341 (with permission).

## Latin Course Offerings (LATN)

101, 102 - Elementary Latin (3, 3)
Essentials of Latin grammar and introduction to translating Latin literature.

201, 202 - Intermediate Latin $(3,3)$
Prerequisite: LATN 102, two units of secondary school instruction in Latin, or placement by departmental exam. Readings in Latin prose and poetry.

Prerequisites for all 300- and 400-level Latin courses: LATN 202, four units of secondary school instruction in Latin, or placement by departmental exam. LATN 425, 451, 452, 491, 492 also require permission of the Classics faculty.
305, 307 - Survey of Latin Literature I, II $(3,3)$
Survey of Latin language and literature from the earliest inscriptions to the end of secular Roman writing. Introduction to materials and methods for the study of classical literature. May be taken in either order.
352 - Roman Drama (3)
Selected plays of Plautus, Terence, and/or Seneca.

353 - Cicero (3)
Readings selected from Cicero's letters and/or orations.

## 354 - Lyric and Elegiac Poetry (3)

Readings from Catullus, Propertius, and Tibullus.

355 - Roman Historical Writing (3) Selected readings from Roman historians.

356 - Vergil (3)
Readings from the Eclogues, Georgics, and/or Aeneid.

357 - Horace (3)
Readings from the Odes and Epodes.
358 - Ovid (3)
Selected readings from Ovid's epic and/or elegiac poems.

425 - Latin Tutoring Practicum (3) Advanced students serve as tutors in introductory or intermediate level Latin classes. Permission of instructor.

430 - Advanced Latin Grammar and Composition (3)
An in depth study of Latin grammar through composition. Required of all Classics majors concentrating in Latin.

432 - Roman Philosophical Thought (3) Readings from Lucretius, Cicero, and/or Seneca.

434 - Roman Satire (3)
Readings selected from the satires of Horace and Juvenal.

451, 452 - Special Studies in Latin Literature $(3,3)$
Reading and study of individual Latin authors or literary genres.

491, 492 - Individual Study in Latin (1-3)
Individual study under the direction of a member of the staff. By permission of the Classics faculty.

## LATIN AMERICAN STUDIES <br> Department of Geography

The Latin American Studies Minor is an interdisciplinary program that seeks to familiarize students with the history, geography, politics, languages and cultures of Latin America. The minor draws on courses in Anthropology, Geography, History, Political Science and Spanish with the goal of providing the student with several disciplinary approaches to the study of this complex region.

## Requirements for the Minor

Eighteen (18) credits including either HIST 361 or 362 and one upper-level Spanish course (chosen from SPAN 312 or higher). The remaining 12 credits will be electives from at least two different disciplines, and can be chosen from approved courses in Anthropology, History, Geography, Political Science, and Spanish.

## Approved Courses*

ANTH 350, 365, 450; GEOG 301A, 360E; HIST 361, 362, 462; PSCI 323, 324, 444; SPAN 327A, 328A, 345, 370, 385B, 485A.

* A course not on this list (including one ANTH, GEOG, HIST, INAF, PSCI, SPAN 499) maybe approved as one elective by the faculty advisor.


## LINGUISTICS <br> Department of English, Linguistics, and Communication

Gary N. Richards, Chair
Judith A. Parker, Career Advisor

## Faculty <br> Professor

Judith A. Parker
Associate Professor Paul D. Fallon
Assistant Professor Janie Lee

## The Linguistics Program

Courses in linguistics offer the student an understanding of the fundamental structure and processes of language, and a focus on how we use language in different forms of communication from infant babbling to conversation and literature. Linguistics courses are a valuable complement to any major that deals with language, literature, the human mind and cognition, sociology, or education.

## Requirements for the Linguistics Minor

 The minor program in linguistics is designed to suit those students with strong interest in pursuing a diversified and well-focused course of study in linguistics as a science, a social science, and a member of the humanities.The minor in linguistics consists of 18 required credits in linguistics. The required courses are as follows:

LING 101: Introduction to Linguistics (3 credits) LING 301: Introduction to Psycholinguistics (3 credits)

LING 302: Introduction to Sociolinguistics and Anthropological Linguistics (3 credits)

LING 309: Introduction to Phonology OR LING 311: Introduction to Morphology (3 credits)

Any 400-level Seminar in Linguistics (3 credits)

Any other linguistics course offered through the Department of English, Linguistics, and Communication (LING 202, 205, 251, 305, $307,310,312,375,491,499$, or alternates of the choices above as approved by an ENLC linguistics advisor).

## Linguistics Course Offerings (LING)

101 - Introduction to Linguistics (3)
Introduction to fresh perspectives on linguistic theory and applications. The course focuses on such diverse topics as animal communication, child language acquisition, human speech, language variation and change, and language as human interaction.

## 205 - Writing Systems of the World (3)

 An introduction to the major writing systems of the world, exploring the linguistic structure, history, and social context of various writing systems, including Chinese, Japanese, cuneiform, hieroglyphic, Semitic languages, English, the Greek and Roman alphabets, and more. In addition, students will learn about the decipherment of the Rosetta Stone, Linear B, and Mayan.251 - Issues in Linguistics (3) Significant topics in linguistics. Specific topics vary.

301 - Introduction to Psycholinguistics (3) Prerequisite: LING 101. An introduction to the mental and biological systems that enable human beings to communicate with language. Topics in psycholinguistics include the biological evolution of language, child language acquisition, speech and language processing, bilingualism, aphasia and dyslexia.

[^4]interaction and the ways language reflects and shapes class, culture, gender, ideology, and conversational style. At the macro level, topics include language maintenance and shift; multilingualism; language variation; language, racism and ethnicity; and language and education.

## 305 - Linguistics and Text (3)

Prerequisite: LING 101. The application of linguistic methods and theories to the analysis of texts in English.

## 307 - Language and Gender (3)

Prerequisite: LING 101. This course focuses on research that investigates the relationship between gender and language use in a variety of contexts from talk at work and in the classroom, to talk at home. It explores how speakers (or writers) create and reflect images of masculinities and femininities in their discourse and the forces shaping these identities.

## 309 - Introduction to Phonology (3)

Prerequisite: LING 101. An introduction to phonology-the sound patterns of languagewith emphasis on both English and a variety of languages. Topics include the relation between phonetics and phonology, the role of distinctive features (the atoms of sound), types of common sound alternations and sound changes, and prosodic phenomena such as stress, rhythm, and intonation. Students will learn to describe patterns, and argue for an analysis. In addition, the course will relate theoretical findings to practical applications.

310 - History of the English Language (3) Prerequisite: LING 101. A history of the English language, with a focus on both the linguistic changes and the socio-historical influences related to those changes. From IndoEuropean and Germanic times, through Old and Middle English, up to modern dialects and current developments of American, British, and World Englishes, students will learn about and analyze the changes and cultures of each period.

311 - Introduction to Morphology (3) Prerequisite: LING 101 or permission of instructor. An introduction to word formation. The course will examine in detail how English and a fascinating variety of languages build existing words from simpler parts, and how they coin new words. Topics include affixation, analogy, compounding,
reduplication, the use of templates, and other types of word formation. Questions to be examined include the definition of "word", the relation of morphology to other aspects of language, the role of psychological factors in a linguistic analysis, and the role of morphology in language change, dialect variation, and language acquisition.

312 - Language Acquisition (3)
Prerequisite: LING 101 or permission of instructor. Focuses primarily on child language acquisition with some attention to adult language acquisition. The course introduces major theoretical perspectives and methodologies in developmental psycholinguistics while examining children's developing linguistic abilities and language. The course complements focuses of other linguistics courses and those of its disciplinary relatives, education and psychology.

375 - Special Studies (3)
Prerequisite: LING 101 or permission of instructor. Studies of significant topics in linguistics. Consult schedule of courses for specific topic.

470 - Seminar in Linguistics (3) Prerequisites: LING 101 and a 300- level linguistics course or permission of the instructor. Advanced work in selected topics in linguistics.

491, 492 - Individual Study in Linguistics (3, 3) Individual study under the guidance of a member of the staff. By permission of the department. Only three credits may be counted toward the English major.

499 - Internship (1-6)
Supervised off-campus experience, developed in consultation with the department. Up to three credits may be counted toward the English major.

## MATHEMATICS

Department of Mathematics
Randall D. Helmstutler, Chair
Randall D. Helmstutler, Career Advisor
for Pure Mathematics
Jangwoon Lee, Career Advisor for Applied Mathematics
Debra L. Hydorn, Career Advisor for Statistics

## Faculty

Professors
Yuan-Jen Chiang
Debra L. Hydorn
Janusz Konieczny
J. Larry Lehman

Keith E. Mellinger
Marie P. Sheckels
Suzanne Sumner
Associate Professors
Manning G. Collier
Julius N. Esunge
Randall D. Helmstutler
Jangwoon Lee
Assistant Professor
Melody B. Denhere
Lecturers
Jennifer Magee
Kelly W. Perkins

## The Mathematics Program

The interests and expertise of the mathematics faculty cover a broad range of mathematical areas, including algebra, analysis, topology (modern geometry), discrete mathematics (mathematics of computer science), number theory, statistics, and applied mathematics. With this spectrum of faculty knowledge, the student is afforded an opportunity to learn the contemporary view of mathematics. Inside the classroom, student comprehension is the main concern of the faculty. Outside the classroom, the faculty offers opportunities for independent study, undergraduate research, and internship supervision.

Courses in mathematics vary from the theoretical to the applied. Thus, a major in mathematics can be a foundation for a career in industry, government, teaching, or the pursuit of a higher degree in graduate school. The department faculty encourages double majors, giving students entrance to a wide variety of fields upon graduation. Majors in other disciplines can be enhanced with
one of our minors in mathematics, applied mathematics, or actuarial science.

University of Mary Washington hosts a chapter of Pi Mu Epsilon, a national honorary mathematics fraternity, and a chapter of the Mathematical Association of America. The Oscar Schultz Award in Mathematics represents the department's top academic honor and is given annually to a junior or senior in the department. Four additional scholarships are available. The recipients of the Meredith C. Loughran '94 Scholarship are selected based on their meritorious academic record, citizenship and leadership in public service. The Merrilyn Sawyer Dodson/class of 1968 scholarship and the Mary Farley Talley '66 scholarship each recognize the scholastic achievements of mathematics majors, while the Louise W. Robertson, M.D. '56 Scholarship is awarded to a student majoring in mathematics or a health field.

Qualified mathematics majors having at least a 3.5 GPA in mathematics courses and an overall GPA of at least 3.0 may graduate with Honors in Mathematics by completing a directed study or undergraduate research which culminates in an approved Honors thesis.

Majors are encouraged to fulfill the general education experiential learning requirement by completing URES 197, MATH 491, MATH 492, or MATH 499. Alternatively, majors may meet this requirement by participating in an approved supervised on-campus or off-campus experiential learning activity developed in consultation with the department (such as the UMW Summer Research Program or a similar program at another college or university). To complete the experiential learning requirement through a summer research experience, contact the department chair for more details.

## Requirements for the Mathematics Major

Thirty-six (36) credits are required. Eighteen (18) credits must be from the following mathematics courses: $223,224,300,431$, 471 and either 432 , or 472 . An additional six (6) credits must be 400 -level with at most three (3) credits of directed study (491/492). An additional nine (9) credits must be from mathematics courses at the 300 - or 400 -level. The remaining three (3) credits must be from: mathematics courses numbered 207 or above; computer science courses numbered 220 or above (except CPSC 302); physics courses
numbered 105 or above; (except PHYS 108); PHIL 306. No internship (499) credits will count for the major. At most six (6) credits of directed study (491/492) will count for the major.

## Mathematics Minor

The minor in mathematics is designed to give students the opportunity to complement their major program of study with a mathematical component, giving them more desirable credentials for future employment. Many areas of study have become increasingly computational in the last decade and adding a minor in mathematics to a degree in, for instance, business, economics, sociology, or one of the natural sciences, will significantly enhance a student's resume. The minor combines four required courses at the 300 level or higher along with flexibility in the choice of the remaining courses so that students will have the freedom to best complement their chosen major course of study.

## Requirements for the Mathematics Minor

Eighteen (18) credits are required. Any course numbered MATH 207 or higher counts toward the minor, with the exception of internship credits (MATH 499). At least 12 credits must be earned from mathematics courses numbered 300 and above. At most three credits of MATH 491 (directed study) may be counted toward the mathematics minor.

## Applied Mathematics Minor

The minor in applied mathematics is designed to give students the opportunity to complement their degree with a computational component. The minor offers a more concentrated applied curriculum and, more importantly, recognition for students working in areas where applications of mathematics have seen a greater presence in recent years. This includes, in particular, the natural sciences such as physics, chemistry, geology, and biology, but also computer science, economics, and business, where mathematical modeling has become very important. Adding the applied mathematics minor to such a degree will give students the more specific recognition for their course work, thereby enhancing their resume.

## Requirements for the Applied Mathematics Minor

Eighteen (18) credits are required. Six credits come from MATH 223 and 312; nine additional upper level credits must come from MATH 300, 351, 352, 381, 382, 411, 461 (with departmental approval), and 491/492 (with departmental approval); the final three credits may be taken from any course in the additional upper level list above or MATH 224, 280, CPSC 220, ECON 301, or any 300/400 level course in a related discipline with mathematics department approval. At most three credits of MATH 491 (directed study) may be counted toward the applied mathematics minor.

## Actuarial Science Minor

The minor in actuarial science provides the necessary background coursework for careers in a field whose demand is constantly on the rise. The minor is open to students from all majors. It offers an opportunity for students to develop the skills expected of entry level actuaries; equipping them with the tools to help companies and businesses to better anticipate and manage risk. This minor also provides reasonable preparation for the first two auctorial examinations.

## Requirements for the Actuarial Science Minor

Students are required to take MATH 223 (3), MATH 381 (3), MATH 481 (3), ECON 201 (3), ECON 202 (3), Students may choose 6-7 credits from ACCT 301 (3), ACCT 302 (3), CPSC 310
(4). ECON 301 (3), ECON 303 (3), ECON 304
(3), ECON 321 (3), ECON 322 (3), MATH 351
(3), MATH 352 (3), MATH 382 (3).

## Mathematics Course Offerings (MATH)

110 - Finite Mathematics with Applications (3) Includes topics such as sets, logic, probability, statistics, and counting. Other topics are at the discretion of the instructor. Designed for the non-major.

## 111 - Precalculus (3)

Emphasis on elementary functions including rational, exponential, logarithmic and trigonometric functions. Designed for students who intend to take calculus.

## 115 - Introduction to Mathematical Modeling (3)

Mathematical topics include linear functions, linear regression, curve fitting, probability models, and difference equations. Emphasis
on environmental issues such as population growth, pollution, natural disasters, epidemics, genetics, and patterns in nature.

## 120 - Quantitative Reasoning for the Sciences (3)

Designed to prepare students for success in the sciences by providing them with appropriate mathematics and quantitative reasoning skills. Course topics include measurement and estimation, growth and decay phenomena, scaling transformations, and an introduction to probability and statistics.

121 - Calculus I (3)
First course in calculus. Includes functions, limits, derivatives, and applications. May include some proofs.

## 122 - Calculus II (3)

Prerequisite: MATH 121. Includes antiderivatives, definite integrals and their applications, the fundamental theorem of calculus, derivatives and integrals of inverse functions, and techniques of integration. (Prospective mathematics majors should take this course during their freshman year.)

## 200 - Introduction to Statistics (3)

First course in statistical methods. Includes descriptive and inferential techniques and probability, with examples from diverse fields. Topics vary with instructor and may also include sampling methods, regression analysis, and computer applications.

201 - Introduction to Discrete Mathematics (3) Designed to prepare prospective mathematics majors for advanced study in the field by introducing them to a higher level of mathematical abstraction. Topics include sets and logic, functions and relations, methods of mathematical proof including mathematical induction, and elementary counting techniques. (Prospective mathematics majors should take this course during their freshman year.)

204 - Mathematical Concepts and Methods I (4) Prerequisite: EDUC 203. Mathematical concepts and methods of teaching for the elementary school. Topics include number systems and their properties, problem solving, and topics in number theory. Course intended for students certifying to teach grades PreK-6. Significant field experience required. (3 lecture credits, 1 practicum credit).

205 - Selected Topics in Mathematics (1-3) Prerequisite: Course dependent. Opportunity for additional study of lower-level topics in mathematics.

207 - History of Mathematics (3)
The history of mathematics begins with the early numbering systems and mathematics of the Egyptians and the Babylonians. The course then turns to the Greeks and their emphasis on logical deduction and geometry. The Arabs develop algebra in the Middle Ages, and calculus is created during the Age of Reason. The development of individual branches of mathematics then is studied (probability, number theory, non-Euclidean geometry, set theory, and topology). The course ends with the Computer Age and implications for the future.

## 223 - Calculus III (3)

Prerequisite: MATH 122. Includes analytic geometry, parametric equations, polar coordinates, improper integrals, L'Hôpital's rule, sequences, and infinite series.

## 224 - Multivariable Calculus (3)

Prerequisite: MATH 122. Includes vectors in two- and three-dimensional space, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, and line integrals.

## 280 - Statistical Methods (3)

Prerequisite: MATH 200. Second course in statistical methods. Includes one-way and higher ANOVA, multiple regression, categorical data analysis, and nonparametric methods with examples from diverse fields. Topics vary with instructor and may also include time series and survival analysis.

300 - Linear Algebra (3)
Prerequisites: MATH 122 and either MATH 201 or CPSC 125. An introduction to linear algebra. Usually includes matrix algebra, systems of equations, vector spaces, inner product spaces, linear transformations, and eigenspaces.

## 312 - Differential Equations (3)

Prerequisite: MATH 122. Ordinary differential equations which may include Laplace transformations, linear differential equations, applications, approximations, and linear systems of equations.

## 321 - Number Theory (3)

Prerequisite: MATH 201 or CPSC 125. An elementary, theoretical study of the properties of the integers.

325 - Discrete Mathematics (3)
Prerequisite: MATH 201 or CPSC 125.
Includes topics such as discrete probability, graph theory, recurrence relations, topics from number theory, semigroups, formal languages and grammars, finite automata, Turing machines, and coding theory.

330 - Foundations of Advanced Mathematics (3) Prerequisite: Any Mathematics course numbered 223 or higher. Introduction to mathematical reasoning and rigor. Includes topics such as basic logic, set theory, mathematical induction, relations, functions, sequences, cardinality, elementary number theory, and axiomatic construction of the real numbers. Emphasis placed on reading mathematics, understanding mathematical concepts, and writing proofs.

351, 352 - Numerical Analysis (3, 3) Prerequisite: MATH 223 and either MATH 300 or MATH 312. MATH 351 introduces the theory and applications of the basic computational techniques of numerical approximation. Topics include an introduction to computer programing and algorithms, root finding, interpolation, polynomial approximation, numerical differentiation and integration, and numerical linear algebra. MATH 352 expands on the basic approximation techniques to include scientific computing. Topics include methods of simulation, initial value problems and boundary value problems for ordinary/parial differential equations, applications in science and engineering. Only in sequence.
361 - Topics in Mathematics (3)
Prerequisite: course dependent. Opportunity for additional study of mathematical topics.

## 372 - Modern Geometry (3)

Prerequisite: MATH 300. Axiomatic development of various geometries including modern Euclidean and non-Euclidean geometry, finite geometries, hyperbolic geometry, and elliptic geometry. Topics could also include convexity, transformational geometry, projective geometry, and constructability.

381, 382 - Probability and Statistical Inference (3, 3)
Prerequisite: MATH 223. An introduction to probability theory and calculus-based statistics including probability distributions of discrete and continuous random variables, functions of
random variables, methods of estimation, and statistical inference. Only in sequence.

411- Chaotic Dynamical Systems (3) Prerequisite: MATH 223. Chaotic dynamical systems including iteration, graphical analysis, periodic points, bifurcations, the transition to chaos, fractals, Julia sets and the Mandelbrot set.

## 412 - Complex Variables (3)

Corequisite: MATH 471. Analytic functions, Cauchy-Riemann conditions, integration, power series, calculus of residues, conformal mappings and applications.

## 431, 432 - Abstract Algebra $(3,3)$

Prerequisite: MATH 300 and at least one other 300 - or 400 -level mathematics class. Mathematical systems including groups, rings, fields, and vector spaces. Only in sequence.

441 - Topology (3)
Prerequisite: MATH 300 and at least one other 300 - or 400 -level mathematics course. Includes topics from point-set topology such as continuity, connectedness, compactness, and product and quotient constructions. .

## 461 - Topics in Mathematics (3)

Prerequisite: Course dependent. Topics such as partial differential equations, optimization, Fourier series, ring theory, cryptology, algebraic number theory, coding theory, and modeling. May be taken up to three times for credit.

471, 472 - Real Analysis (3, 3)
Prerequisites: MATH 223, 300, and at least one other 300 - or 400 -level mathematics course. A rigorous, real analysis approach to the theory of calculus. Only in sequence.

481 - Theory of Interest (3)
Prerequisite: MATH 223. This course introduces the mathematical concepts underlying the theory of interest. Topics include measurement of interest (including accumulated and present value factors), annuities, yield rates, amortization schedules and sinking funds, bonds and related securities, derivative instruments, and hedging and investment strategies.

491, 492 - Directed Study (1-3, 1-3)
Prerequisite: Departmental permission. Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

499 - Internship (credits variable)
Supervised off-campus experience, developed in consultation with the department. Does not count in the major program or minors.

## MIDDLE EASTERN STUDIES

Affiliated Faculty<br>Nabil Al-Tikriti, Department of History and American Studies<br>Maysoon Fayez Al-Sayed Ahmad, Department of Modern Languages and Literatures<br>Mehdi Aminrazavi, Department of Classics, Philosophy, and Religion<br>Farhang Rouhani, Department of Geography and Program Director Ranjit Singh, Department of Political Science and International Affairs

## The Middle Eastern Studies Program

The minor in Middle Eastern Studies is an interdisciplinary program that seeks to familiarize students with the histories, geographies, religions, cultures, arts, languages, and politics of the region known as the Middle East. It draws on courses in Geography, History, Modern Foreign Languages, Political Science, and Religion, fostering connections between different disciplinary approaches to the study of the region. The program thus provides a foundation of knowledge and learning about the Middle East (including the Arab World, Afghanistan, Iran, Turkey, and Israel), while privileging no single country, theme, or political position. Through this program, students will gain both specialized knowledge and broad understanding about this dynamic region, in a manner that promotes dialogue, understanding, and awareness of the Middle East and its place in the world.

## Requirements for the Middle Eastern Studies Minor

Twenty-one (21) credits to include: (1) two sequential semesters of instruction in any Middle Eastern language at Mary Washington or at a comparable institution for transfer credit (6 credits; to be approved by the program director). If a student places out of an approved language, they will need to complete 6 additional credits from the elective list. (2)

Four non-language courses in Middle Eastern Studies, chosen at the 300 or 400 level, or Religion 210, and from at least three different departments ( 12 credits; see course offerings below). (3) A capstone experience in the form of a semester-long, relevant individual study project, study abroad program, or internship ( 3 credits; to be approved by the program director).

Middle Eastern Studies Elective Courses
ARTH/CLAS 305; ARAB 351, 352; GEOG
304; HIST 383, 384, 385, 386, 387; PSCI 355R1; RELG $210,340,341$; selected special topics courses in History or Political Science.

## MILITARY SCIENCE

The University of Mary Washington is an affiliate of the George Mason University Army Reserve Officers' Training Corps (ROTC) Patriot Battalion. This is an elective program that emphasizes leadership and management skills, and provides the opportunity for qualified students to earn a commission as an officer in the U.S. Army while pursuing a baccalaureate degree. Enrollment in military science (MSCI) courses is open to all students, and no military service commitment is incurred by enrolling in lower level, 100 and 200 level, courses. Credit earned in military science courses count towards the degree as elective credits.

The ROTC curriculum is organized into two successive course sequences. The basic course curriculum consists of the fourcourse sequence, MSCI 101, 102, 201 and 202 and is usually taken during a student's first and second year at the University. This series of courses introduce students to the fundamentals of leadership and prepares them for success in the ROTC advanced course. The advanced course curriculum consists of the four-course sequence MSCI 301, 302, 401, and 402. Enrollment in the ROTC advanced course requires students to enter into a contract to serve as a commissioned officer in the active or reserve component of the U.S. Army upon graduation.

Because the ROTC program at the University of Mary Washington is affiliated with the program housed at George Mason University, some training will take place at the George

Mason facilities. For more information about the ROTC program and scholarship opportunities, contact the George Mason University ARMY ROTC, South PE Module MS2F9, 4400 University Dr., Fairfax, VA 22030-4444. Phone 703/ 993-2707 or email goldbar@gmu.edu. Additional information can also be found online at arotc.gmu.edu.

## Military Science Course Offerings (MSCI)

101 - Leadership Skills I : Leadership and Personal Development (1)
Introduces leadership values and ethics; responsibilities of officership; the organization, customs, and traditions of the U.S. Army; time management; and physical well-being. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## 102 -Leadership Skills II: Introduction to Tactical Leadership (1)

Introduces leadership principles, dimensions, styles, and assessment, among other varied topics. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## 201 -Leadership Skills III: Foundations of Leadership (1)

Prerequisite: MSCI 102 or approval of professor of military science. Covers leadership skills, such as values and ethics, how to communicate, how and when to make decisions, how to engage in creative problem solving, and how to plan and organize. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## 202 - Leadership Skills IV: Foundations of Tactical Leadership (1)

Prerequisite: MSCI 201. Builds on the leadership skills developed in Leadership Skills III with additional emphasis on communication, team building, and team leadership. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## 301 - Applied Leadership I: Adaptive Team Leadership (1)

Prerequisite: MSCI 202. Applied leadership with an introduction to the principles of physical fitness and healthy lifestyle; counseling as means of subordinate development; problem solving; operational analysis, development, and execution; and methods for preparing and presenting instruction. Students are given an introduction
to the Leader Development Program that is used to evaluate their leadership performance and provide students with developmental feedback. Some weekend training required. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## 302 - Applied Leadership II: Leadership in Changing Environments (1)

Prerequisite: MSCI 301. Applied leadership covering the models of communications (verbal and non-verbal), technology to communicate, how to prepare and conduct formal briefings, an introduction to the Army branches, diversity and equal opportunity training, ethical decision making, and group cohesion and dysfunction. Some weekend training required. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

401 - Leadership and Management: Developing Adaptive Leaders (1) Prerequisite: MSCI 302. Considered the "transition to lieutenant" phase in which managerial theories are applied to personnel, training, and logistics management situations. Students have command and staff responsibilities and receive hands-on experience operating as a management team. Includes a laboratory in applied science, common military tasks, and physical fitness.

402 - Leadership and Ethics: Leadership in a Complex World (1)
Continuing the "transition to lieutenant" phase of ROTC, examines ethics of military environment to include customs, ethical codes and decision making, constraints, and appeals to moral principles. American judicial system is also examined, with emphasis on the Uniform Code of Military Justice. Command and staff responsibilities are assigned to students for hands-on experience operating as a management team for the cadet corps. Includes a laboratory in applied leadership, common military tasks, and physical fitness.

## MODERN LANGUAGES AND LITERATURES Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair
Marie A. Wellington, Career Advisor French
Marcel Rotter, Career Advisor - German
Elizabeth F. Lewis, Career AdvisorSpanish

## Faculty

Professors
Ana Garcia Chichester, Spanish
Elizabeth F. Lewis, Spanish
Marie A. Wellington, French
Associate Professors
Brooke D. Di Lauro, French
Leonard R. Koos, French
Jeremy G. Larochelle, Spanish
Maria Isabel Martinez-Mira, Spanish
Scott M. Powers, French
Marcel Rotter, German
Jose A. Sainz, Spanish
Federico Schneider, Italian
Assistant Professors
Maria Laura Bocaz-Leiva, Spanish
Antonia L. Delgado-Poust, Spanish
Marcelo Fajardo-Cardenas, Spanish
Jennifer Hansen-Glucklich, German
Lecturers
Maysoon Fayez Al-Sayed Ahmad, Arabic Martha Patricia Orozco, Spanish

## The Modern Languages and Literatures Program

Through courses in Arabic, Chinese, French, German, Italian, and Spanish, the department offers students the opportunity to gain proficiency in understanding, reading, writing, and speaking one or more languages. To supplement language instruction, communicative tools on the internet and laboratory work are used extensively; internships in the community whenever possible and international studies are encouraged as well.

Classes are conducted primarily in the target language. Through classroom instruction, individual research, and work in department sponsored co-curricular programs, students come to know the culture of the people whose language they study. Through internships, students work directly in language-related
professions. The Department of Modern Languages and Literature offers major programs in French, German, and Spanish. Students may also request a special major in Italian Studies. Courses in Arabic and Chinese are currently offered at the beginning, intermediate, and advanced levels. The department offers minors in Business French, Business German, Business Spanish, and also contributes to the minor in Asian Studies. Double majors in a language and another discipline are possible.

The department sponsors various intercultural programs each semester and hosts resident program coordinators who are native speakers of that language.

Summer programs abroad led by faculty members include the following: Arabic language in Petra, Jordan (4 weeks); French language and culture in Paris/Aix-enProvence, France (4 weeks); Italian language and culture in Orvieto, Italy ( 4 weeks); and Spanish language and culture in Bilbao, Spain ( 5 weeks). In addition, the department works closely with the Center for International Education to support and advise students wishing to participate in education abroad programs and helps in planning their study programs. Credits can be accepted from abroad to fulfill department requirements.

Graduates in Modern Languages and Literatures may pursue careers in government or in private fields in which the knowledge of languages is essential, including interpreting, translating, research, social services, education, or international business.

## Modern Languages and Literatures Course Offerings (MDFL)

201 - World Literature in Cultural Context (3) World literature in context-an introduction to literature from Western and non-Western perspectives. Themes and literary techniques from a variety of authors. In English. Other Modern Language courses are listed separately under a heading for each language. See: Arabic, Chinese, French, German, Italian, and Spanish.

## MUSEUM STUDIES

## The Museum Studies Program

Interdisciplinary in nature, the Museum Studies Minor provides students with the academic foundation and practical experience necessary for entrance into museum careers or related graduate studies. The curriculum explores the manner in which museums are organized and operate and how they care for and interpret their collections, serve their audiences, respond to new technologies, and grapple with complex legal and ethical issues unique to their disciplines. Combining theory with practice, the curriculum incorporates classroom study and directed research with practical experiences in the form of field trips, group projects, and internships.

The minor incorporates the disciplines of American studies, anthropology, art and art history, classics, historic preservation, and history, from which students may select their own concentration preference. The minor is open to students from any discipline in the arts and sciences, education, or business colleges at UMW. The University's three museums support this minor with internship opportunities. The museum field is a rapidly expanding and vital part of society. The American Association of Museums estimates there are 17,500 museums currently operating in the United States, generating a demand for highly trained museum professionals.

## Requirements for Museum Studies Minor

 Eighteen (18) credits to include ARTH 315A or HISP 200; ARTH 317 or HISP 463; AMST 499; ANTH 499, ARTH 499, CLAS 499, HISP 499, or HIST 499; 9 elective credits from among: AMST 491; ANTH 309, 341, 342; ARTH 317, ARTH 460; CLAS 380; HISP 208, 303A, 313, 320, 323, 463; HIST 428; Special topics courses in the following disciplines may count in an elective, with the approval of Museum Studies Committee: AMST 350, ANTH 371, ARTH 470, CLAS 351/352, HISP 471, HIST 300 .. 3 credits of AMST, ANTH, ARTH, CLAS, HISP or HIST 499 may be substituted with the approval of Museum Studies Committee. 3 credits of ANTH 481 may be substituted with approval of Museum Studies Committee.Students interested in enrolling in the minor must contact the chair of the Classics, Philosophy, and Religion department for additional information.

## MUSIC

Department of Music

Vacant, Acting Chair<br>Douglas T. Gately, Career Advisor

## Faculty <br> Professor

David J. Long
Assistant Professor
Mark L. Snyder
Senior Lecturer
Douglas T. Gately
Orchestra and Concert Band Director Kevin P. Bartram

## The Music Program

The Department of Music functions as one component of the liberal arts institution. Cognizant of its mission the department offers a Bachelor of Arts degree in music that allows students to focus the major with elective courses. Students might use these electives to develop a specialization in composition, history, performance, technology or theory. Additionally, students may pursue licensure to teach music through the College of Education. A number of ensembles offer performance opportunities for University as well as community musicians. The department also serves the community at large through its offerings of cultural events -- lectures, workshops, and concerts. This liberal arts orientation defines the goal of the major program -- to allow students to pursue a specialized interest in music beyond a specific core of courses. The Department of Music is an accredited member of the National Association of Schools of Music.

The objectives of the major program in music involve preparing students for graduate study as well as for careers in the performing arts, public school teaching, and many other areas. The music department's Pollard Hall includes a small recital hall, a class piano laboratory, practice and rehearsal facilities as well as a recording studio, electronic music lab and media collection. Nearby duPont Hall houses the department's music production lab.

The department presents a wide variety of public musical performances throughout the academic year. Students and faculty appear in general recitals, senior and faculty recitals, and chamber programs. They also perform with the University-Community Symphony

Orchestra, the Concert Band, the UMW Jazz Ensemble, Flute Ensemble, Brass Ensemble, String Ensemble, Fredericksburg Singers, UMW Chorus, and Chamber Chorale. The department and the University also sponsor visiting performers, composers, and lecturers in recitals, concerts, and master classes. The music department offers individual instruction in all traditional wind, string, and keyboard instruments and voice based on competitive auditions. A maximum of 12 credits in individual instruction and 10 credits in performing ensembles may be counted toward the minimum 120 credits required for a degree.

Students should balance their total program before exceeding these limits. Students planning to major in music should take MUTC 100 (Technology for Musicians), MUTH 191 (Diatonic Music Theory) and MUTH 192 (Diatonic Music Theory Skills in their first year. Prospective majors also should audition for admission to individual study in their performance area and to a musical ensemble. Incoming majors also should audition in the winter months for the Aurelia B. Walford and the Henry and Grace Spicer Scholarships, awarded to outstanding performers.

## Requirements for the Music Major

Twenty-six (26) credits in the required core including MUTH 191, 192, 291, 292, 391, 392; two credits from MUPR 205A, 206, 305A, or 405; MUHL 275, 376; MUTC 100. Students take MUTH 490 in the final semester. Students enroll in four semesters of studio lessons and four semesters of ensembles. In addition, students enroll in additional 6 credits for a total of forty (40) credits.

## Requirements for the Music Major Track with Music Licensure

The liberal arts orientation of the teaching licensure track of the major program allows students 1) to pursue an interest in music within the context of a broadly-based program of study; 2) to study the theory, history, and technology of the discipline and applying this information in solo and ensemble performances, and 3) to complete the additional courses in their major discipline and the education department required for licensure within a four-year time span. The University of Mary Washington enjoys reciprocity in 48 states allowing school systems in those states to hire the department's graduates.

## Additional Teaching Licensure

Requirements: MUTH 369 or 483; MUHL 368; MUPR 347, 348. All majors seeking licensure must study their major performance area for a total of 7 credit hours and participate for 7 credit hours in a performing ensemble. They also must have 5 credit hours in minor performance areas.

## Music Course Offerings

Music courses are divided into several categories; Music History and Literature (MUHL), Music Theory (MUTH), Music Technology (MUTC), and Music Performance (MUPR).

## Music History and Literature Courses (MUHL)

151 - Great Musical Masterworks (3)
An introductory level course that follows a "great books" approach. For the non major.

152 - Music and Society (3)
A study of musical works that mirror the society that produced them. The topics chosen for study will include at least two centuries and two continents. For the non major.

## 153 - Women in Opera (3)

A historical survey of opera that focuses on an examination of the roles of women and their social and economic opportunities.

## 154 - Music of Non-Western Cultures (3)

A course investigating the roles of music, its distinguishing features, and performance traditions in eight to 10 geographic regions to appreciate how it differs from a Western perspective.

## 156 - American Music (3)

A study of the developments in American Music provided by America's various ethnicities that focus on genre, composer, and/ or era.

261 - Topics in Vocal Music (3) An exploration of chiefly vocal repertories focusing on genre, composer, and/or era.

262 - Topics in Instrumental Music (3) An exploration of chiefly instrumental repertories focusing on genre, composer, and/ or era.

## 263 - Mozart (3)

A biographical and analytical study of Wolfgang Amadeus Mozart and his music. Works from all genres are included.

275 - Music History I (3)
Prerequisite: MUTH 191. A study of music history from its beginnings through the 17th century. Analysis and research.

## 362 - Beethoven (3)

A biographical and analytical study, pertaining to Ludwig van Beethoven and his music.

368 - History of Jazz (3)
The study of the development of jazz, ragtime, blues, Dixieland, boogie-woogie, and later styles, which evolved in the genre.

## 376 - Music History II (3)

Prerequisites: MUHL 275. A study of music history from the 17th century through the time of Beethoven. Analysis and research.

## 473 - Special Studies in Music History and Literature (3)

Studies of a topic in music history or literature..
491, 492 - Individual Study in Music History and Literature (1-3, 1-3)
Advanced study under the direction of a music department faculty member. Project required. Departmental permission required.

## 499 - Internship in Music History and

 Literature (1-3)Supervised off-campus work developed in consultation with the Department of Music and the off-campus agency. Departmental permission required.

## Music Technology (MUTC)

## 100 - Technology for Musicians (3)

An introduction to notational tools, sound reinforcement, recording, sequencing, video capture/editing and music specific web design and social media.

## 170 - Introduction to MIDI Composition (3)

 An application of basic rhythm, meter, melody, and chords through computer controlled sound production systems and MIDI (musical instrument digital interface), which enables the student to produce original compositions.
## 320 - Audio Recording (3)

Fundamentals of acoustics audio recording for all types of instruments and ensembles including microphone selection and placement, acoustical treatments, professional practices and applications in related fields.

## 330 - Audio Production (3)

Prerequisite: MUTC 320. Production
techniques in a variety of styles with an
exploration of the roles that production, artists, and finances play in the process from conception to finished recording.

## 370 - Electronic Music (3)

An emphasis on historical developments, current status, physical concepts, language, and compositional techniques as they apply to synthesized music. Project required.

473 - Special Studies in Music Technology (3) Studies in a topic in music technology.

## Music Theory Courses (MUTH)

181 - Materials and Sources for Music Theory (3)

A conceptual explanation of basic music vocabulary and sound resources-rhythm, meter, modes, scales, clefs, intervals, notation, acoustics-with musical examples.

191 - Diatonic Music Theory (3)
Corequisite: MUTH 192. Material and structural elements of tonal music: scales, intervals, and chords. Explores major-minor tonality, figured bass, 7th chords, cadence formulae. Includes principles of voiceleading and harmonic progression. Analysis emphasized.
192 - Diatonic Music Theory Skills (1) Corequisite; MUTH 191. Harmonic and melodic dictation in coordination with MUTH 191. Sight-singing, keyboard applications, basic conducting, beginning improvisation techniques.

291- Chromatic Music Theory (3)
Prerequisite: MUTH 191, 192. Corequisite: MUTH 292. Chromatic Music Theory of the 18th and 19th Centuries. Harmonic syntax and structure including altered chords, mixed modes, advanced tonality and modulation, small forms.

292 - Chromatic Music Theory Skills (1) Prerequisite: MUTH 191, 192. Corequisite: MUTH 291. Continued harmonic and melodic dictation in coordination with MUTH 291. Sight-signing, keyboard applications, basic conducting, beginning improvisation techniques.

## 351 - Fundamentals of Counterpoint and Form

 (3)Prerequisite: MUTH 291, 292. Introduction to the principles of counterpoint as exemplified in the music of the Renaissance. Introduction to larger musical forms.

369 - Music Orchestration (3)
Prerequisite: MUTH 291, 292. A study of techniques of instrumental scoring considered historically and creatively. Project required.

## 391 - Post-Tonal Music Theory (3)

Prerequisite: MUTH 291, 292. Corequisite: MUTH 392. Contemporary music theory. Theoretical developments and analytical techniques for the 20th and early 21st Centuries.

392 - Post-Tonal Music Theory Skills (1) Prerequisite: MUTH 291, 292. Corequisite: MUTH 391. Development and application of aural and written skills pertaining to modern era. Includes continuations of sightsinging, dictation, keyboard, conducting, and improvisation techniques.

473 - Special Studies in Music Theory (3) Studies of a topic in music theory.

483 - Music Composition (3)
Prerequisite: MUTH 291, 292. A study of compositional techniques focusing on selected style periods, featuring both large and small models. Creative project required.

490 - Music Seminar (3)
Prerequisite: MUHL 376, MUTH 391. Project required, presenting research from historical and theoretical perspectives.
491, 492 - Individual Study in Music Theory (1-3, 1-3)
Advanced study under the direction of a music department faculty member. Project required. Departmental permission required.
499 - Internship in Music Theory (1-3) Supervised off-campus work developed in consultation with the Department of Music and the off-campus agency. Departmental permission required.

## Music Performance Courses Class Instruction (MUPR)

201, 202 - Class Voice I, II (1, 1)
Class instruction through the intermediate performance level, emphasizing fundamentals of vocal technique through performance, as preparation for private voice study. Placement audition.

203, 204 - Class Voice III, IV (1, 1) Corequisite: Private Voice (Music Performance 301). A comprehensive study of diction applying the standard international phonetic alphabet
to the Italian and German (MUPR 203) and English and French (MUPR 204) languages.

205, 206, 207 - Class Piano I, II, III, (1, 1, 1) Class instruction for beginners through the intermediate level. MUPR 205 and 206 deal with fundamental performance techniques. The course presumes the ability to read music. MUPR 207 emphasizes musical expression and preparation for private piano study. Placement audition.

## 208 - Class Piano IV (1)

Class instruction for developing appropriate collaborative piano skills (ala accompaniment skills) for duo through chamber group performance. Sight reading development is also emphasized.

214 - Class Woodwinds (1)
Beginning group study in performance techniques of woodwind instruments. Recommended for music majors seeking teaching certification in the instrumental area and for students interested in composition.

215 - Class Guitar I (1)
Beginning group study in performance techniques of guitar. Recommended for students with no prior music reading and performing experience. Class Guitar I is an introduction to playing chords, reading music, interpreting charts, and developing basic music skills needed to understand various published methods on learning guitar.

216 - Class Guitar II (1)
Prerequisite: MUPR 215. Intermediate group study in more involved principles and techniques to prepare for private lesson study and ensembles.

223 - Class Brass (1)
Beginning group study in performance techniques of brass instruments.
Recommended for music majors seeking teaching certification in the instrumental area and for students interested in composition.

## 225 - Class Percussion (1)

Beginning group study in performance techniques of percussion instruments. Recommended for music majors seeking teaching certification in the instrumental area and for students interested in composition.

## 235 - Class Strings (1)

Beginning group study in performance techniques of string instruments. Recommended for music majors seeking
teaching certification in the instrumental area and for students interested in composition.

## Private Instruction

Registration for private instruction is contingent upon a successful audition. All 300level courses consist of one half-hour lesson per week for one credit. The 400 -level courses consist of a one-hour lesson per week for two credits. Both are available by permission from the department chairperson. Each course may be repeated for additional credit at the discretion of the instructor. A lesson fee applies for all students.

301, 401 - Voice (1, 2)
305, 405 - Piano (1, 2)
309, $409-\operatorname{Harp}(1,2) 310,410-\operatorname{Organ}(1,2)$
311, 411 - Flute (1, 2)
312, 412 - Oboe (1, 2)
313, 413 - Clarinet (1, 2)
314, 414 - Bassoon $(1,2)$
315, 415 - Saxophone (1 2)
321, 421 - French horn (1, 2)
322, 422 - Trumpet (1, 2)
323, 423 - Trombone (1, 2)
324, 424 - Tuba/Euphonium (1, 2)
325, 425 - Percussion (1, 2)
331, 431 - Violin (1, 2)
332, 432 - Viola (1, 2)
333, 433 - Cello (1, 2)
334, 434 - Contrabass (1, 2)
335, 435 - Guitar (1, 2)
336/436 - Composition $(1,2)$
Performing Ensembles (courses 341-344)
341E - Chorus: UMW Chorus (1)
Treble voices performing representative repertoire of all periods of music. Open by audition.

341F - Chorus: Fredericksburg Singers (1)
Mixed voices performing representative repertoire of all periods of music. Open by audition. In cooperation with local community musicians.

## 341H - Chamber Choir (1)

Mixed voices performing representative repertoire of all periods of music. Open by audition.

## 342 - Orchestra (1)

Opportunity to study and perform selected repertoire representative of the literature written for orchestra. Open by audition. In cooperation with local community musicians.

344 - Instrumental Ensemble (1)
Opportunity to study and perform specialized repertoire. Open by audition.
$344 A 1$ - Instrumental Ensemble: Jazz (1) Opportunity to study and perform specialized repertoire in the jazz genre. Open by audition.
$344 B$ - Instrumental Ensemble: Flute (1) Opportunity to study and perform specialized repertoire for flute choir. Open by audition.
$344 D$ - Instrumental Ensemble: Brass (1) Opportunity to study and perform specialized brass repertoire. Open by audition.

344E Concert Band (1)
Opportunity to study and perform selected repertoire representative of the literature written for band. Open by audition.
$344 F$ - Instrumental Ensemble: String (1) Opportunity to study and perform specialized string repertoire. Open by audition.

344G - Guitar Ensemble (1)
Prerequisite: MUPR 216. Opportunity to study and perform specialized guitar repertoire. Open by audition.

## 347 - Choral Conducting (3)

Prerequisites: MUTH 291, 292. The principles and techniques of choral conducting, including score reading and analysis, program planning, and workshop experience.

348 - Instrumental Conducting (3)
Prerequisites: MUTH 291, 292. The principles and techniques of instrumental conducting, including score reading and analysis, program planning, and workshop experience.

## 441 - Opera Workshop (Operafest) (3)

Opportunity to study and perform scenes from the operatic repertoire. Open by audition. First summer session only.

473 - Special Studies in Music Performance (3) Studies of a topic in music performance.

491, 492 - Individual Study in Music
Performance (1-3, 1-3)
Advanced study under the direction of a music department faculty member. Project required. Departmental permission required.

499 - Internship in Music Performance (1-3)
Supervised off-campus work developed in consultation with the Department of Music and the off-campus agency. Departmental permission required.

## PHILOSOPHY

Department of Classics, Philosophy, and Religion

Craig R. Vasey, Chair and Career Advisor

Faculty<br>Professors<br>David K. Ambuel, Kurt F. Leidecker Co-Chair of Asian Studies<br>Mehdi Aminrazavi, Kurt F. Leidecker<br>Co-Chair of Asian Studies<br>Nina Mikhalevsky<br>Craig R. Vasey<br>Associate Professor<br>Jason P. Matzke

## The Philosophy Program

The discipline of philosophy has been shaped by an intellectual and historical tradition that began some 2500 years ago in Greek culture. "Philosophy" literally means "love of wisdom." It is the systematic study of ideas and issues, a reasoned pursuit of fundamental truths, a quest for a comprehensive understanding of the world, a study of principles of conduct, and much more.

The problems and materials of philosophy are drawn from every aspect of our lives and experience, and its deliberations extend to every subject admitting of disciplined reflection. Students majoring in philosophy will develop knowledge of the history and current state of Western philosophy, critical areas of Asian philosophy, a grasp of representative philosophical issues and ways of dealing with them, a capacity to apply philosophical methods to intellectual problems, and a sense of how philosophy bears on other disciplines and on human life more generally. A philosophy major develops a critical mind, a balance of analytic and interpretive abilities, and a capacity for the imaginative development of abstract formulations and their concrete applications. These virtues make philosophy especially good preparation for responsible citizenship and positions of leadership.

## Requirements for the Philosophy Major

Students wishing to major in Philosophy may choose from two concentrations: the Philosophy major, or the Pre-Law Concentration in Philosophy, which offers special preparation for students considering a career in law or related fields.

1. Requirements for the Philosophy major: Ten courses ( 30 credits) including PHIL 151, 201, 202; one of PHIL 301, 302, 303; one course from the Continental Philosophy set (PHIL $260,342,343,450)$; one course from the Social and Political Philosophy set (PHIL 100, 210, 220, 320, 325, 350) or the Ethics set (PHIL $160,225,226,330,335)$; one course from the non-Western set (PHIL 283, 284, 286, 287, 440); PHIL 485 (Research in Philosophy); two additional courses in Philosophy, at least one of which must be at the 300 - or $400-\mathrm{level}$. With the approval of the major advisor, one of the following may be allowed: CPRD 299, CPRD 331, LATN 432, RELG 306, RELG 314, RELG 317, RELG 331, RELG 341.

## 2. Requirements for the Pre-Law

 Concentration in Philosophy: Ten courses ( 30 credits) in Philosophy, including PHIL 151, 201, 202, 320, 325; one of PHIL 301, 302, 303; one course from the Ethics set (PHIL 160, 225, $226,330,335)$; one course from the Continental Philosophy set (PHIL 260, 342, 343, 450); one course from the non-Western set (PHIL 283, 284, 286, 287, 440); PHIL 485 (Research in Philosophy). Successful completion of LATN 202 (Intermediate Latin) or an upper-level LATN language course. (3 credits)Majors in Philosophy with an interest in graduate studies should take courses beyond the minimum required for the major, and they are especially urged to achieve competence in Greek, Latin, French or German. Students with a 3.5 GPA in Philosophy are eligible for Honors depending upon successful completion of PHIL 485 and defense.

## Practical Ethics Minor

Ethical questions arise in every area of human activity and in every academic major and field. Understanding and using ethical theory and concepts to inform practical issues (and vice versa) is valuable for professional and personal development in a complex and diverse world.

The Practical Ethics Minor is designed to give students an understanding of the fundamental theories, concepts, and methodologies of ethics; to provide practice in identifying and analyzing contemporary moral issues; and to help students better comprehend how theory and practice inform one another.

Students can study a number of ethical issues across many areas including the environment, medicine, law, business, technologies, and
everyday life. Topics include reproductive technologies, euthanasia, the treatment of animals, informed consent, hate speech, pornography, the relation between ethics and law, the value of species and ecosystems, and sustainability. Students who do research or internships in ethics for course credit in any major or field of study can apply for this credit to be used also toward the Practical Ethics Minor.

Students are encouraged to seek service learning and guided research opportunities, both for credit or non-credit. The Practical Ethics Minor will be of particular value to students going on to graduate and professional studies in law, business, medicine, and the environment, and to those pursuing careers in government or other forms of service in the community.

## Requirements for the Practical Ethics Minor

Eighteen (18) credit hours to include a minimum of three courses from the philosophical ethics offerings (Group I), and three additional courses from the remainder of Group I and/or Group II. At least three of the total courses must be at the 300-400 level.

Students who do research of their work for credit in ethics in any major or filed of study - e.g., through URES, independent study, or internships - may use those credits for the minor with approval of the Chair of the Department of Classics, Philosophy, and Religion. Students are also strongly encouraged to seek service learning and guided research opportunities, both for credit or non-credit, through the Center for Honor, Leadership and Service.

Group I (minimum of 3 courses): PHIL 160, $225,226,330,335$, and 430.

Three additional courses taken either from Group I above or from Group II below.

Group II: ANTH 365; BUAD 464; CPSC 302;
EDUC 303 and 420; EDUC 387; EESC 230; GEOG 331, 332, 337, 388, and 399; HISP 208; PHIL 100, 210, 220, and 320; RELG 231; SOCG $315,334,335$, and 354.

Philosophy Course Offerings (PHIL)
100 - Individual and Community (3)
Through a close reading of Plato's Republic,
supplemented by accompanying readings, small tutorial groups will read, write, and talk about specific issues that interest them.

101 - Introduction to Philosophy (3)
A historical introduction to Western civilization's philosophical heritage from Plato to contemporary philosophical movements.

## 110- Introduction to Law and Legal Writing (3)

This course provides a basic understanding of the U.S. legal system. The focus includes essential history and the working structure of the government, procedural issues in the courts, specific concepts of basic categories of law such as contract law and property, the distinctive characteristics of criminal law and procedure, brief writing, the roles of various legal professionals, and the effect of legal ethics on the practice of law.

## 151 - Introductory Logic (3)

Basic principles of analytical reasoning and the appraisal of arguments. Among the topics covered are symbolic language, translation, and methods of formal proof including propositional calculus and first order predicate calculus.

## 160 - Introduction to Ethics (3)

An introduction to ethical theory and a consideration of the central questions about the nature of duty, how one makes decisions about what is morally right and morally wrong, ideas about the good life and the good person, how we come to evaluate our own and other's action, and the relationship of the ethical to other ideas including religious, political, and social values. Course readings draw from the classical historical theorists as well as some contemporary sources; discussions of the readings occur in the context of some specific ethical problems and dilemmas.

201 - Ancient Greek Philosophy (3) Selected works by ancient Greek philosophers, including the pre-Socratics, Plato, and Aristotle.

202 - Early Modern Philosophy (3) Rationalism and Empiricism. Selected works by such early modern philosophers as Descartes, Spinoza, Locke, Leibniz, and Berkeley.

[^5]
## 212 -Aesthetics (3)

The philosophical examination of art and consideration of central questions about the nature of art, the aesthetic experience, principles of evaluating works of art, and the relationship of the aesthetic to other values. Readings cover the major theorists in the history of philosophy as well as current theory and issues about art.

## 220 - Introduction to Feminism (3)

 Study of feminism as a philosophical movement of the 20th century, its historical background, and contemporary feminist issues and theories.
## 225 -Practical Ethics (3)

An introduction to the philosophical examination of contemporary moral issues. Topics might include the death penalty, euthanasia, hate speech regulation, pornography, and human cloning.

## 226 -Medical Ethics (3)

Central ethical issues in clinical medicine. Topics might include the physicianpatient relationship, informed consent and competency, reproductive technology, distribution of scarce medical resources, organ donation, and experimental medicine.

231-Topics in Philosophy (3)
Selected topics outside of regular course offerings.

244 - Philosophy of Science (3)
Prerequisite: Completion of Lab Science General Education requirement. An examination of the philosophical issues raised and illustrated in both scientific theory and practice.

## 260 - Freud's Greatest Hits (3)

A guided tour through Sigmund Freud's most influential and important texts, on dreams, sexuality, the unconscious, slips, religion, and morality. Attention to Freud's life, the impact of his ideas, and critical assessment of his theories and assumptions.

## 275 - Mock Trial Practicum (3)

Credit for satisfactory work on the University's Mock Trial team and course assignments. Introduces students to legal research, briefing, and procedure. Enrollment by permission of department and instructor. Total credits earned for this practicum may not exceed 6 . Offered as pass/fail only.

## 283 -Hinduism (3)

An introduction to the thought and traditions of Hinduism. Readings from the Vedas, Upanishads, Bhagavadgita, Puranas, and philosophical schools. Cross-listed as RELG 283.

## 284 - Buddhism (3)

An introduction to the thought and traditions of Buddhism. Readings from the Dhammapada as well as from various Theravada and Mahayana schools. Cross-listed as RELG 284.

## 287 -Daoism (3)

An introduction to major Daoist texts and the contemporary uses of Daoist thought. Crosslisted as RELG 287.

Prerequisites for courses above 300: at least one course in Philosophy or Permission of the instructor.

## 301 - Medieval Philosophy (3)

Prerequisite: PHIL 201. A survey of philosophical thought in the Jewish, Christian and Islamic traditions.

## 302 - Hume and Kant (3)

Prerequisite: PHIL 202. A study of the major works and influence of Hume and Kant, with emphasis on the Critique of Pure Reason.

303 - Hegel, Marx, and Nietzsche (3)
Prerequisite: PHIL 202. Study of the most important European philosophers of the 19th century.

306 - Advanced Logic (3)
Prerequisite: PHIL 151 or six credits in mathematics. Theory of formal systems; applied criteria of consistency, completeness, and quantification; other topics in symbolic logic.

## 310 - Plato (3)

Prerequisite: PHIL 201. Close study of selected works by Plato and scholarship on Plato.

## 311 - Aristotle (3)

Prerequisite: PHIL 201. Close study of selected works by Aristotle and scholarship on Aristotle.

## 318 - Philosophy of Religion (3)

Philosophical examination of such topics as the relationship between faith and reason, the existence and non-existence of god, life after death, mysticism, and miracles. Cross-listed as RELG 318.

320 - Philosophy of Law I (3)
Central issues in the philosophy of law, including justice, liberty, punishment, responsibility, and the definition of law; discussion of the relation of theoretical questions to contemporary legal issues.

## 325 -Philosophy of Law II (3)

An exploration and analysis of issues in criminal and tort law: responsibility and punishment, causation and liability, acts and omissions, justifications and excuses, and the duty to rescue.

## 330 -Environmental Ethics (3)

A philosophical investigation of topics such as individualistic and holistic ethics, anthropocentrism and ecocentrism, wilderness and sustainability, ecofeminism, and environmental justice.

## 331 -Topics in Philosophy (3)

Selected topics outside of regular course offerings.

## 335 -Ethical Theory (3)

An in-depth study of moral theory. Topics might include relativism, utilitarianism, deontology, virtue theory, care ethics, egoism, and moral pluralism.

## 342 - Phenomenology (3)

The basic concepts and arguments of both transcendental and existential phenomenology, from central works of Husserl and Heidegger.

## 343 - Existentialism (3)

Critical study of major works of Heidegger, deBeauvoir, and Sartre.

350 - Feminist Theory and Philosophy (3) Prerequisite: PHIL 202 or 220. In-depth study of philosophical issues in feminism and implications of feminist theory for epistemology, metaphysics, ethics, and philosophy of science.

## 354 - Philosophy of Education (3)

Historical and contemporary philosophical examination of the goals and methods of education.

407 - Analytic Philosophy (3)
Prerequisites: PHIL 201 and 202. Study of the history, development and some central writings of Frege, Russell, Wittgenstein, Quine and others.

425 - Philosophy Tutoring Practicum (3) Prerequisite: permission of department chair. Advanced students in philosophy serve as
tutors in introductory level philosophy classes, assisting others in preparing for exams and projects, organizing small-group work, and reviewing writing assignments. May be repeated once if tutoring in a different course.

## 430 - Seminar: Ethics, Environment, \&

 Sustainability (3)Prerequisite: PHIL 330 or permission of instructor. Explores philosophical questions in ethics related to the environment and sustainability. Emphasis will be on practical problems with specific topics including population and consumption, pollution, climate change, species preservation, and environmental justice, the concepts of sustainability will both frame the discussions and be itself subject to conceptual analysis.

## 440 -Studies in Asian and Comparative Philosophy (3)

Prerequisite: One of the following: PHIL/ RELG 283, 284, 285, 286, 287. Studies in a topic within Asian philosophical traditions.

450 - Seminar in Twentieth Century Philosophy (3)
Prerequisite: PHIL 202. Intensive examination of a selected author, problem or movement of the 20th century.

481 - Readings in Philosophy (3)
Discussion of philosophical literature in a field selected by the philosophy faculty after consultation with students.

485 - Research in Philosophy (3)
Prerequisite: Senior standing and major in Philosophy or Philosophy, Pre-law Concentration. Capstone course required of all senior Philosophy majors; preparation of a senior thesis under supervision of the Philosophy faculty. Successful completion and defense, with GPA of 3.5 in the major, required for graduation with Honors in Philosophy.

491, 492 - Individual Study (1-3, 1-3)
Prerequisite: permission of department. Tutorial under the direction of a member of the staff. By permission of the instructor and department chair.

499 - Internship (Credits variable) Supervised off-campus experience, developed in consultation with the philosophy faculty.

## Joint Course Offerings

## Classics-Philosophy-Religion (CRPD)

100 - Topics in Classics, Philosophy, and Religion (3)
Special interdisciplinary offerings in Classics, Philosophy, and Religion.

104 - Meditation and Contemplative Practices (3)

This course offers a practical, experiential and theoretical introduction to Mindfulness Meditation and Contemplative Practices. Students learn and practice meditation techniques while exploring the contemplative practices and theories of a variety of cultural traditions (such as Buddhism, Taoism, Native American religious traditions, ancient Greek and Roman philosophical and dramatic traditions) and from a variety of disciplinary perspectives (such as dramaturgy, psychology, philosophy, neuroscience, religion).

299 - Mysterium Humanum Studies (3) Different topics of fundamental human concern are treated at different times in this interdisciplinary course involving the entire faculty of the Department of Classics, Philosophy, and Religion. Topics covered in the past include "Wrestling with Death," "The Tempest of Time," "Sex and Society in the West," and "Slavery."

301, 302 - Studies in Ancient Languages (3, 3) Introduction to the morphology and syntax of selected ancient languages relevant to the study of classics, philosophy, and religion (such as Coptic, Quranic Arabic, Oscan, and Sanskrit). These courses do not satisfy the College's general education requirement for proficiency in a foreign language.

331 - Crossdisciplinary Topics in Classics, Philosophy, and Religion (3)
A consideration of a theme from the perspective of two or three of the disciplines taught in the Department of Classics, Philosophy, and Religion.

## PHYSICAL EDUCATION <br> Department of Athletics, Health and Physical Education

Ken Tyler, Chair

## Faculty

Associate Professors
Deborah A. Conway
Kurt M. Glaeser
Dana Sue Hall
Senior Lecturers
Deena A. Applebury
Patrick L. Catullo
J. Todd Helbling

Marcus N. Kahn
Rodrick L. Wood
Lecturers
Abby G. Brethauer
Lindsey M. Elliott
W. Corey Hewson

Jason A. Kilby
Adekunle O. Lawson
Caitlin E. Moore
Wayne Riser
Matthew K. Troy
Administrative/Professional Faculty
Ian Rogol, Head Athletic Trainer
vacant, Assistant Athletic Trainer
Lauren Wise, Assistant Athletic Trainer

Participation in physical activities, including physical education classes, recreational programs, and intercollegiate athletics, is an essential part of the educational experience at the University.

The center for all indoor health, physical education and recreation is Goolrick Hall. A modern 74,000 square-foot building, it has courts for basketball, badminton, volleyball, handball/racquetball, two dance studios, a six-lane, 25 -yard swimming pool, a weight training room, classrooms, and an auxiliary gym for individual exercise and recreation. A new 15,000 square foot Fitness/Wellness Center was attached to Goolrick in January of 2004. The outdoor facilities include fields for baseball, soccer, lacrosse, field hockey, flag football, softball, and rugby, running trails, an eight-lane, 400 -meter Rubaturf track and a 12 -court lighted tennis complex. A new six-court Indoor Tennis Center was opened in September of 2005.

Physical education courses include history, rules, and basic techniques in individual and team sports. Riding courses are available for credit but require a special fee. All Physical Education courses (except 314 and 318) may be repeated for additional credit, but no more than eight credits may be counted toward the 120 credits required for graduation. If two sections of the same course are taken in one semester, only one will count toward degree requirements.

All Physical Education (PHYD) courses are graded satisfactory/unsatisfactory (SA or UN grades). These courses may not be taken for a letter grade, and they do not ever count toward a student's grade point average.

## The Sports Management Minor

The minor in Sports management is designed to give students the opportunity to complement a major program of study with a concentration of courses in the sports management industry. These courses will provide them with desirable credentials which will enhance future employment opportunities. Students will be introduced to the basic principles of management, marketing, law, finance, and ethics in sport. Students will have an opportunity to apply the basic principles to practical situations in the sport management industry; such as, facility and event planning, budgeting, and facility operations for the professional , semi-professional and collegiate sports venues. Students completing this minor will be equipped for graduate level inquiry and/ or relevant careers in the sport management industry.

## Requirements for the Sports Management Minor

Eighteen (18) credits including MKTG 301, IDIS 130, 230; PHYD 330, 499; and one of the following: MGMT 301 or IDIS 301.

## Physical Education Course Offerings (PHYD)

 102 - Basketball: Men (1)Course includes history, rules, and basic techniques of basketball.

104 - Basketball: Women (1)
Course includes history, rules, and basic techniques of basketball.

105 - Volleyball (1)
Course includes history, rules, and basic techniques of volleyball.

106 - Special Topics in Physical Education (1) Course offers basic techniques, rules, and safety for the designated topic.

110 - Individual Exercise: Weight Training (1) Course includes basic techniques of weight training.

111 - Individual Exercise: Aerobics (1) Course involves individual and group aerobic exercise instruction and participation.

112 - Individual Exercise: Step Aerobics (1) Course includes individual and group step aerobic exercise instruction and participation.

## 113 - Individual Exercise (1)

Course includes personal program of individual exercises.

116 - Swimming (1)
Course includes basic techniques of swimming.

117 - Swimming: Non-Swimmers (1)
Course includes basic techniques of swimming.

123 - Soccer (1)
Course includes history, rules, and basic techniques of soccer.

132 - Tennis (1)
Course includes history, rules, and basic techniques of tennis.

134 - Tennis/Badminton (1)
Course includes history, rules, and basic techniques of tennis and badminton.

146 - Adaptive Individual Exercise (1) For handicapped students. Prerequisites: medical authorization and permission of instructor. An opportunity for physically handicapped students to participate in individual exercise.

## 147 - Elementary Position and Control in Riding (1)

Designed for those who have never ridden hunt seat. General handling of the horse, basic terminology; riding at the walk, trot, and canter, using elementary aids.

148 - High Elementary Position and Control in Riding (1)
Designed for those who have limited experience in riding or those who have taken

PHYD 147. Review of 147; introduction of soft contact and jumping over low fences on loose reins.

## 248 - Intermediate Position and Control in

 Riding (1)The beginning of soft, precise controls; coordination of the rider's aids with the horse's efforts. Continuation of jumping fundamentals and crest release; work over simple courses.

302 - Basketball: Men (1)
Prerequisite: PHYD 102. Advanced instruction in basketball.

304 - Basketball: Women (1)
Prerequisite: PHYD 104. Advanced instruction in basketball.

305 - Volleyball (1)
Prerequisite: PHYD 105. Advanced instruction in volleyball.

306 - Special Topics in Physical Education(1)
Course offers basic technique, rules, and safety for the designated topic.

310 - Individual Exercise: Weight Training (1) Prerequisite: PHYD 110. Advanced instruction in weight training.

311 - Individual Exercise: Aerobics (1)
Prerequisite: PHYD 111. Advanced instruction in aerobics.

312 - Individual Exercise: Step Aerobics (1)
Prerequisite: PHYD 112. Advanced instruction in step aerobics.

## 313 - Individual Exercise (1)

Prerequisite: PHYD 113. Advanced instruction in individual exercise.

314 - Lifeguard Training (1)
Teaches individuals skills, procedures, and philosophies associated with lifeguarding. Students become aware of common hazards in aquatic environments; learn to recognize victims in distress or drowning situations; establish an awareness of the responsibilities of a lifeguard; and develop speed, endurance, and technique in swimming and lifeguarding skills. May not be repeated for additional credit.

316 - Swimming (1)
Prerequisite: PHYD 116. Advanced instruction in swimming.

317 - Swimming: Non-Swimmers (1)
Prerequisite: PHYD 117. Advanced instruction for the non-swimmer.

323 - Soccer (1)
Prerequisite: PHYD 123. Advanced instruction in soccer.

330 - Events and Facility Management (3) Prerequisite: IDIS 130. This course will examine all of the facets of public assembly facility management as they relate to sports arenas, ballparks, stadiums, and other venues. Among the topics to be presented and explore will be: event booking, finance, marketing, operations, scheduling, staffing and ticketing. This is a core requirement for the Sports Management minor.

## 332 - Tennis (1)

Prerequisite: PHYD 132. Advanced instruction in tennis.

334 - Tennis/Badminton (1)
Prerequisite: PHYD 134. Advanced instruction in tennis and badminton.

346 - Adaptive Individual Exercise (1) Advanced instruction for handicapped students. Prerequisites: PHYD 146, medical authorization and permission of instructor. An opportunity for physically handicapped students to participate in individual exercise.

## 348 - Advanced Equitation, Schooling, and

 Competition (1)Prerequisite: One year of riding at Mary Washington or demonstration of thorough understanding of the forward school of riding. Preparation of student horses for competition; schooling of green horses, reschooling of problem horses; preparation of IHSA open riders for competitions.

400 - Intercollegiate Baseball (1)
Participation on Intercollegiate Men's Baseball Team.

403 - Intercollegiate Basketball: Men (1) Participation on Intercollegiate Men's Basketball Team.

404 - Intercollegiate Basketball: Women (1) Participation on Intercollegiate Women's Basketball Team.

406 - Intercollegiate Cross Country: Men (1) Participation on Intercollegiate Men's Cross Country Team.

407 - Intercollegiate Cross Country: Women (1)

Participation on Intercollegiate Women's Cross Country Team.

408 - Intercollegiate Women's Field Hockey (1) Participation on Intercollegiate Women's Field Hockey Team.

410 - Intercollegiate Lacrosse: Men (1) Participation on Intercollegiate Men's Lacrosse Team.

411 - Intercollegiate Lacrosse: Women (1) Participation on Intercollegiate Women's Lacrosse Team.

412 - Intercollegiate Riding (1)
Participation on Intercollegiate Riding Team.
413 - Intercollegiate Soccer: Men (1)
Participation on Intercollegiate Men's Soccer Team.

414 - Intercollegiate Soccer: Women (1) Participation on Intercollegiate Women's
Soccer Team.
422 - Intercollegiate Softball (1)
Participation on Intercollegiate Women's
Softball Team.
428 - Intercollegiate Swimming: Men (1)
Participation on Intercollegiate Men's
Swimming Team.
429 - Intercollegiate Swimming: Women (1)
Participation on Intercollegiate Women's
Swimming Team.
431 - Intercollegiate Tennis: Men (1)
Participation on Intercollegiate Men's Tennis Team.

432 - Intercollegiate Tennis: Women (1)
Participation on Intercollegiate Women's
Tennis Team.
482 - Intercollegiate Track: Men (1) Participation on Intercollegiate Men's Track Team.

483 - Intercollegiate Track: Women (1)
Participation on Intercollegiate Women's Track Team.

484 - Intercollegiate Women's Volleyball (1) Participation on Intercollegiate Women's Volleyball Team.

499 - Sports Management Internship (3) Prerequisite: PHYD 330. This is a core requirement to the Sports Management minor.
An internship is a supervised experience relating to the field of Sports Management. There will also be multiple seminar sessions throughout the semester relating to the internship experience.

## PHYSICS

Department of Physics
Hai T. Nguyen, Chair
George King, III, Career Advisor

Faculty<br>Professor<br>George King, III<br>Associate Professor

## Hai T. Nguyen The Physics Program

The study of physics provides the basis for understanding the fundamental laws of the physical universe. The principles of physics underlie other natural sciences and are essential to many applied sciences and technical programs. The physics program's goal is to expose students to a broad range of physical phenomena. In doing so, the program strives to meet the needs of students who will become specialists in physics, as well as numerous related fields. A secondary aim is to satisfy the interest of students who take physics to fulfill a general education requirement.

Senior majors may participate in undergraduate research, which could qualify as an honor thesis and/or result in a presentation at a local or national conference. The Society of Physics Students and its honorary society, Sigma Pi Sigma, have sponsored guest speakers and field trips to national laboratories and conferences.

Physics is a major for students interested in challenging, exciting, and productive careers in fields such as: acoustics, astronomy, astrophysics, atomic physics, biophysics, chemical physics, fluid dynamics, geophysics, low-temperature physics, medical physics, materials science, nuclear physics, optics, particle physics, physics education, plasma physics, solid state physics, spectroscopy and vacuum physics. Graduates have gone on to successful careers as researchers, educators, engineers, etc.

Credit for only one introductory physics sequence (101-102, 101-108, 103-104, 105-106 or $105-110$ ) can be counted toward the degree requirement.

## Requirements for the Physics Major

Forty-one (41) credits as follows: Thirty-two
(32) credits from PHYS 105, 106, 211, 317, 320, $330,384,410$, and 482 ; at least nine (9) credits from PHYS 201, 210, 283, 292, 471, and 472.

## Physics Minor

The minor in physics will meet the interest of students who wish to further their knowledge in a discipline beyond their major field of study. It will increase their options for employment and graduate study. It will bridge the overlap between physics knowledge and that of other disciplines.

## Requirements for the Physics Minor

Twenty-four to twenty-six (24-26) credits as follows: PHYS 105, 106, 211 and 317 (14 credits); select one course from PHYS 201, 210, 283 or 292 ( $3-4$ credits); select two courses from PHYS 320, 330, 384, 410 and $472(7-8$ credits).

## Physics Course Offerings (PHYS)

101, 102 - General Physics w/Lab $(4,4)$ Prerequisite: PHYS 101 for PHYS 102. An introductory course covering the fundamentals of physics. Primarily for non-science majors. Emphasis on building concepts and applying principles. Topics discussed: classical mechanics, thermodynamics, electricity, and magnetism, optics, and special relativity. Facility with algebra and trigonometry is required. Only in sequence. Laboratory.

103 - Elementary Astronomy w/Lab (4) An introductory course in astronomy emphasizing the study of the solar system. The course is primarily for non-science majors. The content covers seasons, eclipses, planetary and lunar motion, planetology and the relevant laws of physics. Laboratory.
104 - Elementary Astronomy (3)
Prerequisite: PHYS 103. A continuation of introductory astronomy emphasizing the study of stars and stellar evolution, quasars and galaxies. The cosmology of the universe for non-science majors starts with detailed descriptions of our Sun and ends with the search for dark energy, dark matter and the accelerating universe. Recent developments covered.

105, 106 - University Physics w/Lab $(4,4)$ Prerequisite: PHYS 105 for PHYS 106. Corequisites: MATH 121 for PHYS 105 and MATH 122 for PHYS 106. Calculus-based introductory course primarily for science students. Topics covered: classical mechanics, thermodynamics, electricity, magnetism, optics and some modern physics. Only in sequence. Laboratory.

108 - General Physics (3)
Prerequisite: PHYS 101. The continuation of introductory physics. Primarily for nonscience majors. Emphasis on building concepts and applying principles. Topics covered: electricity and magnetism, optics, atomic physics and special relativity. Facility with algebra and trigonometry is required.

110 - University Physics (3)
Prerequisite: PHYS 105. Corequisite: MATH 122. A continuation of the calculus based introductory physics course. Primarily for science majors. Topics covered: electricity and magnetism, optics and some modern physics.

## 201- Thermodynamics and Statistical Mechanics (3)

Prerequisite: PHYS 106. Temperature, thermodynamic states and variables, the laws of thermodynamics, entropy, thermodynamic potentials, change of phase, and the statistical properties of thermodynamic systems.

## 210 - Nuclear Physics (3)

Prerequisites: PHYS 106 and MATH 122.
Topics include: nuclear structure, static and dynamic properties of the nucleus, radioactive decay, the Bateman equation, mass parabolas, transition rates, and particle accelerators.

## 211 - Modern Physics (3)

Prerequisites: PHYS 106 and MATH 122;
Covers development of 20th century physics

- special relativity, introduction to quantum mechanics, wave-particle duality, nuclear, atomic and molecular structure.

283 - Electronics w/Lab (4)
Prerequisite: PHYS 106 and MATH 122. Basic circuit theory, network filters, power supplies, nonlinear devices and basic digital circuit theory; experiments using linear and nonlinear elements. Laboratory.

## 292 - Optics w/Lab (4)

Prerequisites PHYS 106 and MATH 122. Introduction to topics in geometrical and physical optics: reflection, refraction, superposition, interference, diffraction, polarization, laser systems, and holography. Laboratory.

317 - Methods of Mathematical Physics (3) Prerequisites: PHYS 106 and MATH 122; Recommended: MATH 224; or permission of the instructor. Development of methodologies needed to study advanced physics: vectors and matrix algebra, vector calculus,
differential equations, orthogonal functions, complex numbers, Fourier series, probability distributions, and numerical methods.

## 320 - Classical Mechanics I w/Lab (4)

Prerequisites: PHYS 211 and MATH 224; Corequisite: MATH 312. Recommended: PHYS 317. General kinematics and dynamics of single particles and systems of particles in three dimensions, harmonic motion, central forces, conservation laws, Lagrange and Hamiltonian mechanics. Laboratory.

330 - Electricity and Magnetism I w/Lab (4) Prerequisites: PHYS 211 and MATH 224 and 312; Recommended: PHYS 317. Development of electric and magnetic static properties in vacuum and matter, electrodynamics and Maxwell's equations. Laboratory.
384 - Advanced Physics Laboratory (4) Prerequisite: PHYS 211. Recommended: PHYS 292. Experiments relevant to 20th century physics: electron's charge and mass, charge quantization, atomic spectra, microwave properties, speed of light, intensity and attenuation of radiation.

410 - Quantum Mechanics I w/Lab (4) Prerequisites: PHYS 211 and MATH 224 and 312. Recommended: PHYS 317. Introduction to basic principles of non-relativistic quantum mechanics: wave packets, uncertainty principle, wave functions, Schrodinger equation, harmonic oscillator and hydrogen atom. Laboratory.

471 - Selected Topics in Physics (1-3) Prerequisite: permission of the instructor. Specialized topics in physics not offered on a regular basis, such as particle physics, atomic and molecular spectroscopy, general relativity advanced classical physics and advanced quantum physics.

## 472 - Solid State Physics (3)

Prerequisite: PHYS 211. Introduces the physics of solids - elementary materials science; electrical, optical and magnetic properties of materials; the modern theory of solids (band theory, Fermi energy and surfaces, phonon behavior); fundamental semiconductor characteristics and device physics.

482 - Physics Seminar (2)
A capstone course for senior physics majors only. Students give oral presentations on selected topics in physics.

491, 492 - Individual Study (1-3, 1-3)
Open to junior and senior physics majors. May repeat for Honors in Physics at four credits each semester.

## 499 - Internship (Credits Variable)

Supervised off-campus experience, developed in consultation with the department.

## POLITICAL SCIENCE <br> Department of Political Science and International Affairs

John M. Kramer, Chair
Jason W. Davidson, Career Advisor and Director of the Security and Conflict Studies Minor Program

Faculty
Distinguished Professor
John M. Kramer
Professors
Jason W. Davidson
Stephen J. Farnsworth, Director of the Center for Leadership and Media Studies
Elizabeth F. Larus
Associate Professors
Robert R. Barr
Rosalyn L. Cooperman
Surupa Gupta
Emile J. Lester
Chad Murphy
Ranjit Singh

## The Political Science Program

Political Science, the study of how various political systems work, offers courses ranging from urban politics and government to international politics. The department also provides many outlets through which students can gain practical knowledge of the field, including visits to Virginia's state capital and to Washington, D.C., internships in governmental offices, and involvement in major political events, such as the United Nations' student conference. Political Science is a good background for a career in law, urban planning, teaching, government, and private enterprise; it also lends itself to further study in graduate school.

Requirements for the Political Science Major<br>Thirty-six (36) credits including PSCI 101, 102,

201, and one political science class, which may also be used to fulfill other political science major requirements, designated as "Writing Intensive." One course each to be chosen by faculty advisor and student from each of the following subfields: American Politics; Comparative Politics; International Relations; Political Theory; Fifteen (15) additional credits in political science. PSCI 101-102 is a prerequisite to all Political Science courses, except PSCI 201.

## Security and Conflict Studies Minor

The minor in Security and Conflict Studies is designed to provide students with a foundation in the contemporary study of security and conflict in the world today. Students will learn and apply analytical frameworks that facilitate the selection of optimal policies for solving security and conflict problems. Students will also be exposed to and utilize frameworks that aide in the comprehension of unfolding events in security and conflict. Finally, students will learn about specific issues in security and conflict. Coursework covers topics encompassing the historical (e.g., the origins of World War II) to the contemporary (cyberwarfare) and the conventional (threats to territorial integrity) to the cutting edge (disease as a security issue). Students completing the minor will be well equipped for graduate level inquiry and/or relevant careers in government or the private sector.

## Requirements for the Minor in Security and Conflict Studies

Eighteen (18) credits as follows:

1) PSCI 387.
2) Twelve (12) credits selected from the following group of courses (with at least one course from each discipline): HIST 356, 371, $372,375,377,385,390,420,421$, PSCI 321, $324,354,355,356,357,360,367$. Other courses (e.g., "special topics" courses) in security and conflict studies may count as electives with the approval of the Minor Program Director. A relevant three-credit internship may count as an elective with the approval of the Minor Program Director.
3) HIST 485, INAF 491 or PSCI 491: three (3) credit senior thesis on an aspect of security and conflict studies directed by a member of the core faculty. Thesis topic must be approved by the Minor Program Director.

## Political Science Course Offerings (PSCI)

101 - Introduction to Political Science (3) Survey of the basic concepts and theories of political science, including comparative analysis of political institutions and ideologies.

## 102 - Introduction to International Relations (3)

Survey of major issues in international politics and foreign affairs, with emphasis on global awareness of states, regions, and politics in the international system.

## 201 - American Government (3)

Principles of Political Science as applied to American national government.

202 - American Public Policy (3)
A study of selected issues in public policy, including those related to the economy, health care, poverty, education, and the environment.

## 301 - Comparative Government of Western

 Europe (3)Comparative analysis of the governments of the United Kingdom, France, and Germany.

302 - The Politics of Soviet Successor States (3) A comparative analysis of politics in Soviet successor states and the legacy bequeathed to them by communist rule in the U.S.S.R.

304 - Contemporary American Politics (3) In-depth analysis of selected problems in contemporary American politics.

311 - Congress and the Political Process (3) Analysis of the contemporary role of Congress in its relation to the Presidency, the federal bureaucracy, and pressure groups.

312 - The American Presidency (3)
Analysis of the modern Presidency and its role in the American political system.

## 313 U.S. Federal Judiciary (3)

Prerequisite: PSCI 101, 102. Analysis of the federal judiciary and its role in the American political system.

321 - Theories of International Relations (3) Analysis of major theories of international relations. Topics include war, peace, international security, political economy, and global institutions such as the United Nations system.

## 323 - Latin American Politics (3)

Comparative analysis of politics in Latin
America, including historical precedents and
contemporary systems in several of the region's countries.

324 - U.S. - Latin American Relations (3)
Study of U.S. foreign policy towards Latin America, including its major historical developments and contemporary challenges.

## 332 - Metropolitan Problems (3)

Analytical study of the problems of American cities and other areas.

## 334 - Political Parties and Elections in America (3)

Structure and function of political parties; conduct of elections; pressure groups.

350 - Politics of Developing Countries (3) Analysis of major issues and theories of political development in Latin America, Africa, and Asia, including political modernization and decay, civil society, and North-South relations.

351 - International Political Economy (3) Analyzes the interplay of politics and economics in international economic relations. Focuses on contemporary debates over issues such as trade and monetary relations, foreign investment, foreign aid and debt, economic development and globalization.
354 - Politics of South Asia (3)
Study of political life in India, Pakistan, Bangladesh, and Sri Lanka.
355 - Politics of the Middle East and North Africa (3)
Study of politics in Iran, Israel, Turkey, and the Arab World. Featured topics may include Islam and politics, nationalism and the impact of Westernization, the Arab-Israeli conflict, and politics in the Persian Gulf.

356 - American Foreign Policy (3)
Problems facing the United States in its search for national security and international stability.

357 - Russian Foreign Policy (3)
Analysis of the foreign policy of postcommunist Russia.

360 - Theory and Practice of Revolution (3)
Comparative analysis of theories of revolution and case studies of selected revolutions.

## 362 - The Politics of Central and Eastern

Europe (3)
Study of political life under both communist and post-communist rule in Bulgaria, the

Czech and Slovak Republics, Hungary, Poland, Romania, and the former Yugoslavia.
363 - Mass Media Politics (3)
Study of the role of the mass media in shaping political attitudes and events.
366 - Government and Politics of China (3) The study of political and economic development of the People's Republic of China from both historical and conceptual perspectives, including discussion of political and economic reform since 1978, rising differentiation within Chinese society, human rights, and prospects for democracy in China.

## 367 - East Asia in World Affairs (3)

The role of East Asian countries in international affairs. Special emphasis is placed on the examination of the foreign policies of China and Japan, the development of Greater China, tension on the Korean Peninsula, and cooperation and conflict in the Pacific Rim over national security, trade issues, and human rights.

## 370 - Women and Politics (3)

Provides an overview of the major issues concerning women and politics. This course examines the historical evolution of women's participation in American politics, analyzes the experience of women as voters, candidates, and officeholders, evaluates the impact of specific public policies on women, and, considers the status of women from a comparative perspective.

## 387 - Security and Conflict Studies (3)

 Analysis of contemporary security and conflict challenges (e.g., proliferation of Weapons of Mass Destruction) with an emphasis on frameworks for choosing best policies to address these challenges.391 - Research and Writing in Political Science (3)

Prerequisite: permission of the instructor. Principles of research and writing techniques for political science.

## 422 - American Civil Liberties (3)

Intensive analysis of civil liberties in the United States, based primarily upon decisions of the Supreme Court.

441 - History of Political Thought I (3)
Examination of the contributions of the great political theorists from Plato to Burke.

442 - History of Political Thought II (3)
Examination of the contributions of modern political philosophers.

## 444 - Political Movements and Organizations in Latin America (3)

Intensive analysis of political organizations and movements in contemporary Latin America. Topics may include political parties, guerrilla movements and populism.

450 - US Political Film (3)
An examination of the political meaning and implications of influential American film, paying particular attention to the changing political and cultural messages found in films from different decades..

## 471 - Political Science Seminar (3)

Intensive reading and group discussion of selected topics in political science.

491 - Individual Study in Political Science (3) Directed individual research on approved problems in political science.

499 - Internship (Credits variable) Supervised off-campus experience, developed in consultation with the department. Up to 3 credits can be applied to the major.

## PRE-CONSERVATION IN FINE ART <br> Carole Garmon, Program Director

## The Pre-Conservation in Fine Art Program

The Pre-Conservation in Fine Art minor provides students with the necessary background coursework required for entrance into graduate programs in art conservation. The minor is open only to Art History, Studio Art and Chemistry majors. The major must have been declared before the student may declare this minor.

## Art History Major -- Requirements for the Pre-Conservation in Fine Art Minor

Twenty-eight (28) credits including CHEM 111, 112, 211, and 212 ( 16 credits) and an additional 12 credits selected from ARTH 303, ARTH 450, ARTS 281, and ARTS 381.

## Chemistry Major -- Requirements for the Pre-Conservation in Fine Art Minor

Twenty-seven (27) credits including ARTH 115,

ARTS 105, 120, 231, 242 and an additional 12 credits selected from any 300 -level Art History (ARTH) courses.

## Studio Art Major -- Requirements for the Pre-Conservation in Fine Art Minor

 Twenty-eight (28) credits including CHEM 111, 112,211 , and 212 ( 16 credits) and an additional 12 credits selected from any 300 -level Art History (ARTH) courses.
## PSYCHOLOGY

## Department of Psychological Science

David W. Kolar, Chair<br>Virginia Mackintosh, Career Advisor<br>Miriam N. Liss, Community Service Learning Advisor<br>Mindy J. Erchull, Psi Chi Advisor

Faculty
Professors
Christopher T. Kilmartin
Miriam N. Liss
Christine A. McBride
Associate Professors
Mindy J. Erchull
Steve R. Hampton
David W. Kolar
Virginia H. Mackintosh
Jennifer R. Mailloux
David A. Rettinger
Holly H. Schiffrin
Debra C. Steckler
Assistant Professors
W. David Stahlman

Hilary E. Stebbins
Laura C. Wilson

## The Psychology Program

The psychology major provides students with a sound introduction to psychology as a scientific discipline, including both traditional areas and more recent trends and theoretical developments. Psychology majors receive extensive training in methodology and statistics. The study of psychology emphasizes critical thinking and the development of writing, oral communication and research skills.

Students are exposed to the variety of subject areas that define the field of psychology and are given the opportunity for hands-on, empirical work. Many students work on research teams and do year-long research projects under the
direction of an individual faculty member. A variety of internships are offered at local businesses and social service agencies.

Course sequences prepare students for either graduate work or employment immediately after graduation. Employment options include research in various business settings; social work; human resource management; computer applications; and counseling and case management in social service and mental health settings like probation and parole, mental retardation, substance abuse, and adolescent/adult group homes. The curriculum also provides an excellent preparation for professional school and graduate study in psychology. Courses offered in collaboration with Business Administration explore the application of psychological principles and research methods to various work environments for students interested in careers in management, human resources, organizational behavior, organizational development, and industrial/organizational psychology.
The department sponsors a chapter of Psi Chi, the national honorary society in psychology, which annually sponsors an undergraduate research symposium at which students present both course and team research projects. Students are encouraged to be members of the Virginia Psychological Association and present their research at meetings of the Association. Each year the department awards several scholarships: the J. Christopher Bill Scholarship in Psychology to an outstanding rising senior in psychology, Minnie Rob Phaup Memorial Scholarships to junior and senior psychology majors, and the Burney Lynch Parkinson Memorial Scholarship to a student interested in education. The department also presents the Outstanding Senior Psychology Award to a graduating major.
Department facilities include computer laboratories suitable for both general student use and specialized work in cognition, sensation and perception, and physiological psychology; an animal laboratory complete with a vivarium, surgery, shop, and computerized experimental controls; a computerized video laboratory for studying social, developmental, and group processes; a number of rooms and a variety of equipment suitable for conducting empirical research with human participants; facilities for psychological
testing; and computerized physiographs for use in experimental and clinical applications.

## Requirements for the Psychology Major

 Thirty-seven (37) credits in Psychology courses, including $100,261,360,362$, and 421; and at least one course from each of the following four groupings: (1) $301,311,342$; (2) $305^{*}, 372^{*}, 374,394$ ( ${ }^{*}$ if this course is taken to fulfill 2 , then it cannot count toward 3); (3) $305^{*}, 372^{*}, 373,453$ ( ${ }^{*}$ if this course is taken to fulfill 3 , then it cannot count toward 2); (4) 331, 332,333 ; (5) 411, 412, 413, 414, 492**; (6) six credits of other Psychology courses including one of the following Out-of-Class Experiences: 40 hours of Community Service Learning, 322, 491 and $492^{* *}, 499$. (**Completion of PSYC 492 satisfies both 5 and 6.) The community service option requires at least 40 hours of volunteer work at an approved community service site or at least 20 hours at each of two sites, and attending one reflection session per site during each semester of service. Students completing their community service during their last semester must complete all requirements by March 1 (November 1 for those finishing in December).
## Neuroscience Minor

Neuroscience is the interdisciplinary study of the brain and the nervous system. A minor in Neuroscience would help both psychology and biology majors keep abreast of scientific progress in this discipline and help prepare them for emerging career opportunities. The Neuroscience minor would be an appropriate minor for anyone interested in a psychiatric health-care career including general medicine but especially psychiatry, pharmacology, psychiatric-mental health nursing, clinical psychology, or cognitive rehabilitation. This minor would also provide a strong undergraduate foundation for further training in a graduate program in neuroscience or psychobiology.

## Requirements for the Neuroscience Minor

Seventeen (17) credits, consisting of the following required courses: PSYC 305, 374, 394, BIOL 340, and 410. Please note that only two of the Psychology courses can count toward the Psychology major requirements.

## The UMW Psychology and NECC Collaboration

UMW students may enroll in a semester
long program in Boston at The New England Center for Children working with children with autism spectrum disorders and other disabilities. Students must have completed 12 hours in Psychology, and either PSYC 320 or 453 , to be eligible for this program. Students will enroll for two courses that will count as electives in the UMW Psychology major (PSYC $401,402,403,404,405$, or 406 ), and spend about 30 hours each week gaining hands-on experience as student teachers. This experience will result in six internship credits and six course credits for the semester.

Students will enroll at UMW and pay for full time tuition and fees (in state or out of state as appropriate), as well as the current cost of double occupancy housing. NECC will provide housing in close proximity to the Center; the student is responsible for the cost of their own food.

To obtain more information about this program, or to apply, please see Dr. Kolar, the Psychology Department chairperson, or the Psychology website at cas.umw.edu/ psychology.

## Psychology Course Offerings (PSYC)

100 - General Psychology (3)
Fundamental principles of human behavior; history of psychology; research methods; the nervous system; learning; memory; personality; psychological disorders; therapy; social behavior; careers in psychology.

261 - Introductory Statistics for Psychology (3) Prerequisite: PSYC 100. Introduction to descriptive and inferential statistical methods, including basic ANOVA and simple regression. Experience includes problem solving, technical writing, and use of computer statistical packages (SPSS).

301 - Social Psychology (3)
Prerequisite: PSYC 100. Individual behavior in a social context; attitudes; social influence; attribution; prejudice and discrimination; prosocial behavior and aggression.

305 - Cognitive Neuroscience (3)
Prerequisite: PSYC 100. Introduction to the neural basis of cognitive processes emphasizing changing models of cognitive functioning.

311 - Abnormal Psychology (3)
Prerequisite: PSYC 100. Various models of psychopathology, history of abnormal
psychology, psychological disorders: their causes, and therapies.

315 - Foundations of Clinical Psychology (3) Prerequisite: PSYC 100. Professional issues in clinical psychology, assessment of intelligence and personality, theories and practices of the major schools of psychotherapy, effectiveness of psychotherapy, community psychology, and primary prevention.

318 - Applied Counseling Psychology (3) Prerequisites: PSYC 100 and either 311, 315,320 , or 342. Introduction to activities of psychological counselors with a focus on practical experience and skill building. Major emphases on psychological testing and building an effective counseling relationship.

## 320 - Psychology of Exceptional Children and Youth (3)

Prerequisites: PSYC 100 and either 331 or 332. A consideration of theories, relevant empirical research, and interventions regarding cognitive, emotional, and behavioral exceptionalities from infancy through adolescence.

## 322 - Mentoring Children at Risk (3)

 Prerequisite: PSYC 100 and permission of instructor. Course combines lecture with hands-on work with children of incarcerated mothers at a summer camp. Topics covered in lectures include models of developmental psychology; middle childhood development; maternal incarceration; the impact of poverty on development in children; risk and resilience; and managing problem behaviors. Mentoring component involves spending one week at a sleep-over camp specifically for children of incarcerated mothers.331 - Developmental Psychology: The Infant and Child (3)
Prerequisite: PSYC 100. Psychological development from conception through childhood. Consideration of developmental processes, theories, issues, and relevant research.

332 - Developmental Psychology: The Adolescent and Adult (3)
Prerequisite: PSYC 100. Theories of, and research on, personality, social, physical, and intellectual characteristics from adolescence to young adulthood.

## 333 - Psychology of Aging (3)

Prerequisite: PSYC 100. Theories and research in aging, changes in personality, intellectual
abilities, cognitive capacities, and physical capabilities from adulthood to death.

## 339 - Health Psychology (3)

Prerequisite: PSYC 100. Exploration of psychological issues surrounding health, illness, and medical care. Social psychological perspectives are applied to such topics as stress-related diseases, exercise adherence, and doctor-patient interactions.

## 342 - Psychology of Personality (3)

Prerequisite: PSYC 100. Personality structure, dynamics, development, and methods of research.

## 346 - Forensic Psychology (3)

Prerequisites: PSYC 100 and 301 or 311 or 320 or 342. Examination of criminal behavior from a psychological perspective, including causes of criminal behavior, the criminal personality, the relationship between psychology and law, how psychology is applied to legal situations, rehabilitation, and the prediction of dangerousness.

## 347 - Psychology of Men (3)

Prerequisite: PSYC 100. Impact of sex and gender on male behavior, including models of masculine development. Includes work, physical and mental health, violence, ethnicity, sexuality, and relationships.

349 - Psychology of Human Sexuality (3) Prerequisite: PSYC 100. Introduction to major areas of investigation concerning human sexuality, including anatomy, physiology, culture, behavior, sexual health, sexual violence, dysfunctions, and therapy.

350 - Psychology of Women (3)
Prerequisite: PSYC 100. Impact of sex and gender on the individual, interpersonal, and institutional female experience. Includes work, physical and mental health, physical and cognitive ability, social status and empowerment, ethnicity, and sexuality.
360 - Advanced Statistics for Psychology (3) Prerequisite: PSYC 261 with a minimum grade of C-. Introduction to advanced statistical methods, including ANOVA models, a priori and post hoc tests, and multiple regression. Particular emphasis on quasi-experimental and correlational methods, as well as data entry, analysis using SPSS, and presentation.
362 - Research Methods for Psychology (4) Prerequisite: PSYC 261 with a minimum grade of C-. Introduction to both laboratory
and applied methods commonly used in psychological research including experimental, quasi-experimental, observational, qualitative, and correlational methods. A strong focus on the role of ethics in research is integrated into student's own process of data collection, data analysis using SPSS, and formal presentation of their research results.

372 - Sensation and Perception (3) Prerequisite: PSYC 100. Study of the processing of environmental energy by the sensory systems (visual, auditory, somatosensory, olfactory, and gustatory), as well as the higherorder processing of activity in those systems, from psychophysical, physiological, and behavioral perspectives.

373 - Cognitive Psychology (3) Prerequisite: PSYC 100. The study of human information processing, including pattern recognition, attention, memory, language, problem solving, and decision making.

## 374 - Biological Psychology (3)

Prerequisite: PSYC 100. Exploration of biological bases of behavior and neurological correlates of psychological events.

385 - Organizational Psychology (3) Prerequisite: MGMT 301. Behavioral aspects of organizations, presenting concepts, theories, research, and research techniques applicable to people in organizations. Topics include personnel selection and placement, job and work environments, worker motivation, job satisfaction, and the organizational and social context of human work. Cross-listed as MGMT 345.

386 - Human Resources Management (3) Prerequisite: MGMT 301. Philosophy, principles, policies, and programs for effective personnel management and industrial relations in business, governmental, and not-for-profit organizations. Cross-listed as MGMT 346.

## 387 - Organizational Development and Change (3)

Prerequisites: MGMT 301. System-wide application of behavioral science methods, theories, and accumulated knowledge to the development, change, and reinforcement of organizational strategies, structures, and processes for improving organizational effectiveness. Cross-listed as MGMT 347.

## 392 - Behavior Genetics (3)

Prerequisites: PSYC 100 and one year of biology. Use of principles of genetic
transmission, population genetics, and evolutionary and sociobiological theories in the study of individual differences.

## 394 - Psychopharmacology (3)

Prerequisites: PSYC 100 and one year of biology or one year of chemistry. Principles of drug action in the body, drug effects on behavior, and the social psychology of drug use.

399 - Psychology in Europe (3) Prerequisite: PSYC 100. In this three credit summer course, students travel to different European cities to trace the roots of Psychology in Europe. Through lectures, readings, tours, and group discussions, students learn about important figures and events in Psychology.

401 - Behavior Assessment (3)
Prerequisites: Twelve hours in Psychology and either PSYC 320 or 453, and acceptance into the UMW-NECC program. This course will provide an introduction to key concepts, methods, and ethical considerations associated with behavioral assessment. Course objectives will include teaching students to distinguish between idiographic and normreferenced assessment approaches, to conduct pertinent behavioral assessments (preference assessments, functional assessments, and skills assessments), and to incorporate assessment outcomes with treatment selection and design in accordance with contemporary best practices in the field of applied behavior analysis. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

402 - Principles of Behavior Analysis (3) Prerequisites: Twelve hours in Psychology and either PSYC 320 or 453 , and acceptance into the UMW-NECC program. This course will orient students to the concepts, processes, and scientific principles of behavior on which the field of applied behavior analysis was founded. Topics of study will include the history and defining features of applied behavior analysis as well as the role of basic principles in producing socially meaningful behavior change (positive and negative reinforcement, punishment, discriminative control of behavior, and motivating operations). Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

403- Behavioral Interventions (3)
Prerequisite: 12 hours of PSYC, either PSYC 320 or 453 and acceptance into the UMWNECC program. This course will prepare students to identify, implement, and maintain effective behavioral interventions in applied settings. Specific objectives will include teaching students to select and implement function-based interventions for the reduction of problem behaviors, skills-based prevention strategies, and a variety of behavioral teaching tactics. Tactics for promoting, procedural integrity and facilitating the generalization and maintenance of treatment effects will also be reviewed. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

404 - Methods of Evaluation (3) Prerequisites: Twelve hours in Psychology and either PSYC 320 or 453, and acceptance into the UMW-NECC program. This course will equip students with skills needed to confirm the clinical efficacy of interventions by subjecting them to experimental evaluation using single-subject designs. Students will learn to develop valid and reliable systems for measuring behavior, to display data using popular and accessible graphing software, and to assess for orderly changes in behavior through visual inspection and interpretation of graphic data. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

405 - Evidence-based Teaching (3) Prerequisites: Twelve hours in Psychology and either PSYC 320 or 453, and acceptance into the UMW-NECC program. This course will provide students with a comprehensive review of empirically-supported behavioral teaching procedures for individuals with autism and related disabilities. Topics will focus on teaching skills in a variety of content areas such as language, social, and selfhelp. Procedures for teaching these include, match-to-sample discrimination training, task analysis, as well as prompting procedures including prompt fading and video modeling. Course available only to UMW students enrolled in the UMW-NECC cooperative program at the New England Center for Children.

406 - Autism and Related Disabilities (3) Prerequisites: Twelve hours in Psychology
and either PSYC 320 or 453, and acceptance into the UMW/NECC program. This course will provide students with a foundation in etiological, diagnostic, ethical, and treatmentrelated considerations affecting services for individuals with autism and other disabilities. Topics of study will include current data on causal variables, issues in early identification, and a survey of evidence-based models of treatment, outcome evaluation, and effective systems support for individuals with pervasive developmental disabilities. Course available only to UMW students enrolled in the UMWNECC cooperative program at the New England Center for Children.

## 411 - Research Seminar in Abnormal, Personality, or Social Psychology (3)

Prerequisites: PSYC 360, 362, and one from the following: PSYC 301, 311, or 342. Exploration of current theory and research in abnormal, personality, or social psychology with a focus on designing, conducting, and reporting research in these areas.

## 412 - Research Seminar in Biological Psychology (3)

Prerequisites: PSYC 360 and 362, and one from the following: PSYC 305, 372, 374, or 394. Exploration of current theory and research in the biological influences on and correlates of behavior, with a focus on designing, conducting, and reporting research in this area.

## 413 - Research Seminar in Cognition or Learning (3)

Prerequisites: PSYC 360 and 362, and one from the following: PSYC 305, 372, 373, or 453. Exploration of current theory and research in cognition and human learning with a focus on designing, conducting and reporting research in this area.

## 414 - Research Seminar in Developmental Psychology (3)

Prerequisites: PSYC 360 and 362, and one from the following: PSYC 331, 332, or 333. Exploration of current theory and research in human development, with a focus on designing, conducting and reporting research in this area.

## 421 - History of Psychology (3)

Prerequisite: Fifteen hours in Psychology.
Survey of historical antecedents of modern psychology.

453 - Fundamentals of Learning and Motivation (3)
Prerequisite: PSYC 100. Survey of empirical findings and theoretical issues in the analysis of learning and motivation and their interaction in the determination of behavior.

470 - Seminar in Psychology (3) Prerequisites: PSYC 100 and courses specified by instructor. Seminar on enduring and/or contemporary issues in psychology. Different topics in different semesters. May be repeated with different topics.

480 - Selected Topics in Psychology (3)
Prerequisites: PSYC 100 and courses specified by instructor. Enduring and/or contemporary issues in psychology. Different topics in different semesters. May be repeated with different topics.

490 - Guided Readings in Psychology (1-3) Prerequisites: Junior standing and twelve credits in psychology beyond PSYC 100. Readings in a specialty area of psychology. Maximum of three credits toward the major; maximum of six credits in PSYC 490, 491, and 492 combined may count toward the major.

## 491 - Individual Research (3)

Prerequisites: PSYC 360 and 362 and permission of instructor. Empirical investigation and/or theoretical research. Maximum of six credits in PSYC 490, 491, and 492 combined may count toward the major program.

## 492 - Individual Research (3)

Prerequisites: PSYC 491 and permission of instructor. Empirical investigation and/or theoretical research with emphasis on research writing and oral presentation of results. Maximum of six credits in PSYC 490, 491, and 492 combined may count toward the major program.

## 499 - Internship (1 to 6 credits)

Prerequisites: Junior standing and 12 hours in psychology beyond PSYC 100. Supervised offcampus experience. Prerequisites for specific internships differ. Maximum of three credits toward the major program.

RELIGION<br>Department of Classics, Philosophy, and Religion

Craig R. Vasey, Chair
Mehdi Aminrazavi, Career Advisor

## Faculty

Professors
James E. Goehring
Mehdi Aminrazavi, Kurt F. Leidecker
Co-Chair of Asian Studies
Associate Professor
Mary Beth S. Mathews
Assistant Professor
Daniel A. Hirshberg

## The Religion Program

The discipline of religion investigates the religious dimension of human existence throughout history and across cultures. Courses in religion acquaint students with the world's major religious traditions, texts, and figures. Students learn the many ways of studying religion and engage in critical discussion of diverse themes and issues. The small size of the religion program permits personal attention. The major in religion offers a high degree of flexibility, and individual interests are encouraged. A degree in religion equips students with the tools of a liberal education necessary for many careers. Religion graduates enter the world beyond college with a broad cultural awareness and an ability to engage in dialogue discerningly. They are trained to conduct research, to think critically, and to write and express ideas persuasively. Religion majors have pursued careers in such fields as public relations, journalism, teaching, library science, service organizations, business, and the arts. The B.A. in religion also prepares students for graduate school or seminary study in religion, as well as for graduate study in other fields such as law and social work.

Honors are awarded in religion on the basis of excellence in religion major course work and in writing a senior thesis in RELG 401 - Guided Research. Internships are available to qualified students. Various courses in other disciplines are accepted towards the religion major which allows students to have an interdisciplinary approach in the formation of their major. Various religion offerings also complement work in American studies, anthropology, classics, drama, English, history, international
affairs, philosophy, and psychology, among other disciplines.

## Requirements for the Religion Major

Thirty (30) credits including RELG 101; one course from RELG 103, 117, 201, or 206; one course from RELG 210, 283, 284, 286, or 287; RELG 401; and 18 additional credits chosen from religion courses or CPRD 299, PHIL 301, ANTH 318. Nine of the additional credits ( 3 courses) must be at the 300 - or $400-$ level, and two of these must be religion courses (excluding 499).

Prerequisites: All 300- and 400-level religion courses have as a prerequisite any one 100- or 200-level religion course or the permission of the instructor.

## Religion Course Offerings (RELG)

101 - Introduction to World Religions (3) Survey of the major religions of the world including among others Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, and Daoism.
102 - Introduction to the Study of Religion (3) Examination of the religious dimension of human life, the ways in which it is defined, and the methods by which it is studied.

## 103 - The Abrahamic Religions (3)

Introduction to the religions of Judaism, Christianity, and Islam.

117 - Introduction to Christian Theology (3) Christian theology is characterized as a way of seeking to make sense of life in relation to central doctrines and concepts.

## 201 - Judaism (3)

Historical and religious development of Judaism from biblical times to the present.

## 205 - Hebrew Bible (3)

Study of the literature, history, and culture of ancient Israel within the broader context of the ancient Near East.

206 - Christian Beginnings (3)
Study of the literature, history, and beliefs of the first Christians within the broader cultural context of the Roman Empire.

210 - Islam (3)
This introductory course examines the Quran, the life of the prophet Muhammad, Islamic law, philosophy, theology, mysticism, and art.

211 - Greek and Roman Religion (3) The public, personal, and mystery religions of the Greeks and Romans, and the development of classical religious ideas. Cross-listed as CLAS 211.

231 - Special Studies in Religion (3) Among topics taught at different times: Current Theological Issues, The Roman Catholic Tradition, World Religions II. Different subjects taught under this course number count as different courses.

250 - African American Religions (3) A study of the variety of African American religious expression from colonial times to the present. Course will include slave religions, African American interpretations of Protestant and Roman Catholic thought, religion and the Civil Rights struggle, as well as Santeria and Voodoo.

## 251 - Native American Religions (3)

A study of the variety of Native American religious expression from pre-European contact times to the present. Course will explore the similarities and differences among the beliefs of the First Nations, as well as a discussion of how contact with European settlers influences those beliefs.

## 277 - Religion in America Before the Civil War

 (3)An examination of principal figures, trends, and issues in religion in America from the precontact era to the Civil War.

## 278-Religion in America After the Civil War

 (3)An examination of principal figures, trends, and issues in religion in America from the Civil War to present day.

## 283 - Hinduism (3)

An introduction to the thought and traditions of Hinduism. Readings from the Vedas, Upanishads, Bhagavadgita, Puranas, and later works. Cross-listed as PHIL 283.

284 - Buddhism (3)
An introduction to the thought and traditions of Buddhism. Readings from the Dhamapada as well as from various Theravada and Mahayana traditions. Cross-listed as PHIL 284.

287 -Daoism (3)
An introduction to major Daoist texts and the contemporary uses of Daoist thought. Crosslisted as PHIL 287.

301 - Jesus in Gospel and Film (3)
Study of selected presentations of Jesus from the first century until today. Emphasis will be gospel traditions and film.

## 304 - Significant Books in American Religious History (3) <br> A reading-intensive examination of books that

 have played a critical role either in shaping American religious history or interpreting periods of American religious history.305 - Religion and Politics in the United States (3)

A historical and thematic examination of the interaction of religion and politics in U.S. culture.

306 - The World of Early Christianity (3) The theology and social world of the early Christian churches in the second through fourth centuries.

308 - Gnostic Religions in Late Antiquity (3)
Study of Gnostic religions in late antiquity and their influence in early Christianity. Emphasis will be placed on the reading and interpretation of primary texts.

310 - Women and Sexuality in the Western Religious Tradition (3)
Study of the changing understanding and roles of women and sexuality in the western religious tradition from the origins of Christianity to modern times.

318 - Philosophy of Religion (3)
Philosophical examination of such topics as the relationship between faith and reason, the existence or non-existence of God, life after death, mysticism, and miracles. Cross-listed as PHIL 318.

331 - Special Studies in Religion (3)
Among topics taught at different times:
Asceticism, Body, and Gender in Late Antiquity; 19th-Century Theology; Religion and Politics in Islam, Early Christian Monasticism. Different subjects taught under this course number count as different courses.

## 340 - Mysticism East and West (3)

Study of the mystical dimensions of Judaism, Christianity, Islam, Hinduism, Buddhism, and Taoism.

341 - Major Religious Thinkers (3) Among thinkers studied in some depth at different times: Augustine, Avicenna, al-Ghazzali, Dostoevsky, Kierkegaard, Wiesel.

Different figures taught under this course number count as different courses.

## 400 - Research Seminar: Selected Religious

 Texts (3)Prerequisite: Junior or senior status or consent of instructor. In-depth study of selected religious texts chosen by the instructor. Text selection will vary; examples include the Bhagavadgita, Kierkegaard's Philosophical Fragments and Augustine's Confessions.

## 401 - Guided Research (3)

Preparation of a senior thesis under the direction of the religion faculty. Choice of topic by student. Capstone course required of all senior majors.

491, 492 - Individual Study (1-3, 1-3)
Individual work under the guidance of the religion faculty. By permission of the instructor and chair.

499 - Internship (1-6)
Supervised off-campus learning experience, developed in consultation with the religion faculty.

## Joint Course Offerings

Classics-Philosophy-Religion (CPRD)
100 - Topics in Classics, Philosophy, and Religion (3)
Special interdisciplinary offerings in Classics, Philosophy, and Religion.

104 - Meditation and Contemplative Practices (3)

This course offers a practical, experiential and theoretical introduction to Mindfulness Meditation and Contemplative Practices. Students learn and practice meditation techniques while exploring the contemplative practices and theories of a variety of cultural traditions (such as Buddhism, Taoism, Native American religious traditions, ancient Greek and Roman philosophical and dramatic traditions) and from a variety of disciplinary perspectives (such as dramaturgy, psychology, philosophy, neuroscience, religion).
299 - Mysterium Humanum Studies (3) Different topics of fundamental human concern are treated at different times in this interdisciplinary course involving the entire faculty of the Department of Classics, Philosophy, and Religion. Topics covered in the past include "Wrestling with Death," "The Tempest of Time," "Sex and Society in the West," and "Slavery."

301, 302 - Studies in Ancient Languages (3, 3) Introduction to the morphology and syntax of selected ancient languages relevant to the study of classics, philosophy, and religion (such as Coptic, Quranic Arabic, and Sanskrit). These courses do not satisfy the College's general education requirement for proficiency in a foreign language.

## 331 - Crossdisciplinary Topics in Classics, Philosophy, and Religion (3)

A consideration of a theme from the perspective of two or three of the disciplines taught in the Department of Classics, Philosophy, and Religion.

## SOCIOLOGY

Department of Sociology and Anthropology

E. Eric Gable, Chair<br>Leslie Martin, Career Advisor

## Faculty

Professors
Timothy A. Crippen
Debra J. Schleef
Associate Professors
Tracy B. Citeroni
Hui-Jung Kim
Kristin L. Marsh
Leslie E. Martin
Assistant Professor
Eric Bonds

## The Sociology Program

Sociology systematically investigates human society and social interaction, seeking to understand patterns of organization and change in a variety of settings.

The sociology major offers a strong foundation in sociological theory and methods of research. In addition, students take courses to deepen their understanding of socialization, culture, social organization, social change, differentiation, and inequality. Courses focus on such topics as ethnic and racial relations, family, gender, medicine, occupations and professions, organizations, politics and the state, popular culture, population, religion, urban life, aging, juvenile delinquency, and criminology.

Special readings and individual study and research offer students the opportunity to pursue areas of special interest. Supervised internships are also available.

The program of study is designed to provide sociology majors with a strong foundation for graduate work in the social sciences, as well as for a variety of careers, including elementary and secondary teaching, social services, public policy formulation, public administration, urban planning, and research in both public and private agencies, including private industry and the allied health professions.

## Requirements for the Sociology Major

Thirty-two (32) credits, including SOCG $105,364,365,471$ or 472 , and eighteen (18) additional Sociology credits excluding internships. One of these courses may be a lowerlevel sociology course other than SOCG 105; at least five must be courses at the 300-400 level. A maximum of six upper-level anthropology credits, excluding individual study (ANTH 491, 492) and internships (Anthropology 499) may be substituted for upper-level sociology courses. Note that MATH 200: Statistics is a prerequisite for SOCG 364: Quantitative Research Methods and Analysis and must be taken prior to enrolling in this course.

## Social Justice Minor

Social justice emphasizes equity and fairness in all aspects of human experience. The Social Justice minor allows students to explore injustices such as cultural imperialism, exploitation, human rights abuses, marginalization, and structural and physical violence using a variety of disciplinary perspectives and tools. Further, the Social Justice minor encourages students to recognize and work to ameliorate injustice in its myriad forms through a combination of classroom, research, and practical experiences in local and global communities.

## Requirements for the Social Justice Minor

 Eighteen (18) credits, including AMST 201; four electives, three of which must be upperlevel, drawn from at least three disciplines; SOCG 475 or an approved three-credit internship or an approved three-credit course within a study abroad program.Lower-Level Electives: ANTH 211, 212; GEOG 101; PHIL 210, 220; WGST 101.

Upper-Level Electives: ECON 324, 351; ENGL 328, 329, 352, 360, 378; GEOG 331, 332, 339; HIST 308, 315, 385, 396; SOCG 304, 404, 421, 442; SPAN 345, 365.

## Sociology Course Offerings (SOCG)

## 105 - The Social World (3)

An introduction to the nature and scope of sociology, emphasizing the development and uses of basic concepts, theories, and methods of inquiry. Emphasis varies by instructor.

## 155 - Social Issues (3)

Sociological perspectives for analyzing social problems such as economic inequality, race relations, and crime. Emphasis varies by instructor.

## 301 - Evolution and Social Behavior (3)

 Prerequisite: SOCG 105 or 155 or permission of the instructor. A comprehensive assessment of basic theory in the evolutionary behavioral sciences and an application of these tools to the study of social behavior in human and nonhuman societies.
## 304 - Social Stratification (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Analysis of class, race, and gender inequality in U.S. society. The nature and consequences of social stratification and power in modern society.

## 313 - Urban Sociology (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Problems of city growth and living; the influence of social, cultural, and ecological factors upon social organization and everyday social relationships in urban areas.

## 315 - Gender and Society (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Sociological study of gender differentiation in American society, with an emphasis on major social institutions and social change.

## 320 - Food Justice (3)

Prerequisite: SOCG 105 or 155 or permission of instructor. Sociologists study food in order to puzzle through the complicated questions of fairness, equity, justice, and all human beings; inherent right to nourishment and sustenance. What would a "just" food system look like? What social groups are advancing this cause in contemporary society? How successful have their efforts been? What can/will we do to contribute to this process? How will we adequately, healthily, and sustainable feed others and ourselves.

## 331 - The Family (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Historical changes in American patterns of marriage, divorce, and
child rearing; social class, racial, and ethnic variation; and alternative family forms.

## 332 - Introduction to Social Welfare (3)

 Prerequisite: SOCG 105 or 155 or permission of instructor. The history, philosophy, and institutionalization of social welfare; social work as a profession; methods and policies.
## 334 - Medical Sociology (3)

Prerequisite: SOCG or 155 or permission of instructor. The relationship of disease and health to social structure and culture. Organizational and role analysis of the medical care industry, various allied health professions, and alternative approaches to coping with health and illness.

## 335 - Global Perspectives on Health and Illness (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Analyze problems of health, illness, inequality, and care at the global level. Examine health care systems and health promotion in comparative perspective. Explore how social forces shape individual and group health behaviors and illness experiences in various structural and cultural contexts. Emphasis on health rights as human rights.

341 - American Society (3)
Prerequisite: SOCG 105 or 155 or permission of the instructor. Study of selected issues in contemporary U.S. society.

## 342 - Sociology of Work: Occupations and Professions (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Analysis of major occupational groups; special emphasis on professions and executive roles; relationship of occupations to other aspects of society; the growth of leisure.

## 351 - Juvenile Delinquency (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. The development of the concept of juvenile delinquency. The extent and nature of delinquent behavior and efforts at explanation and control.

352 - Criminology (3)
Prerequisite: SOCG 105 or 155 or permission of the instructor. Explanatory theories and descriptive research on adult crime; survey of the American criminal justice system.

354 -- Environmental Sociology (3) Prerequisite: SOCG 105 or 155 or permission of instructor. Examines how contemporary social organization drives environmental
degradation and renders some people more vulnerable to its effects, and whether a shift in environmental consciousness and individual behaviors is sufficient to create a more harmonious relationship between society and the natural world.

364 - Quantitative Research Methods and Analysis (4)
Prerequisites: SOCG 105 or 155 or permission of the instructor, and MATH 200. Quantitative sampling and study design, questionnaire construction and administration, analysis of survey data with emphasis on crossclassification, correlation, and regression techniques.

## 365 - Qualitative Research Methods and Analysis (4)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Introduction to qualitative sociological research methods, including participant observation, interviewing, and narrative analysis. Students will engage in independent research to gather and analyze qualitative data.

## 371 - Selected Topics in Sociology (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Major concepts or points of view in contemporary sociology with an emphasis on discussion. Topic varies.

## 400 - Sociology of the Body (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. How are bodies socially constructed? Seminar examines social, particularly feminist, theories of embodiment. Central questions consider how bodies are sexed/gendered, racialized, ethnicized, aged, sexualized, classed, sickened/cured, and otherwise modified through social processes. Also explores the subjective experience of embodiment.

404 - Global Inequality and Development (3) Prerequisite: SOCG 105 or 155 or permission of the instructor. Examines social, economic, and political development at the global level and in comparative perspective. Students consider competing perspectives on global inequality, with attention to the role of power relations and historical contingencies in shaping issues of development and underdevelopment.

## 411 - Popular Culture (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Traditional sociological conceptions of popular culture as well as
recent theoretical interventions and studies of everyday life, gender, social class, and race and ethnicity from feminist studies, American studies, minority discourses, and cultural studies. Popular culture as a meaningful site of political and social resistance for the disenfranchised.

415 - Sociology of Law (3)
Prerequisite: SOCG 105 or 155 or permission of the instructor. The role of law in American society, particularly the relationship between legal and other institutions. Sociological approaches to American legal cultures, the legal profession and legal education, law and social change.

## 421-Racial and Ethnic Relations (3)

 Prerequisite: SOCG 105 or 155 or permission of the instructor. Analysis of the relationship between ethnic and racial groups and their relationship to the dominant ethnic majority in America and other societies. Sociological examination of concepts such as racism, racial identity, prejudice, discrimination, inter-group conflict, power, assimilation, and pluralism.
## 432 - Political Sociology (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Theories and research regarding the social structural and cultural bases of political authority in society; emphasis given to the polity, power, and political action as integral aspects of socio-cultural organization and dynamics.

## 434-Gender and Work (3)

Prerequisite: SOCG 105 or 155. This seminar examines the opportunities, imperatives, and experiences of women and men at work. Work is structured by institutional arrangements that come before us and that change over time and is shaped in relation to institutions in society other than the economy, especially the family. Work, occupational opportunities and cultural expectations are also shaped by the intersectionality of class, race, and gender in our lives and experiences. Readings and projects are selected to emphasize related questions and themes.

## 440 - Sociology of Education (3)

Prerequisite: SOCG 105 or 155 or permission of the instructor. Formal and informal educational processes in various societies with an emphasis on stratification in education in the U.S. Theoretical and methodological approaches to studying education as a social institution.

442 - Social Change (3)
Prerequisite: SOCG 105 or 155 or permission of the instructor. Considers alternative theoretical approaches to the study of social change, with an emphasis on collective action outside of "normal" politics and contestation as process. Examination of historical and socio-economic context in shaping limits and potential for social change.

## 471 - History of Social Theory (3)

Prerequisites: SOCG 105 and completion of at least 6 credit hours of 300-400 level sociology courses, or permission of the instructor. Presentation and analysis of major forms and themes of social and early sociological theory from the 19th century to the early 20th century.

472 - Contemporary Sociological Theories (3) Prerequisites: SOCG 105 and completion of at least 6 credit hours of 300-400 level sociology courses, or permission of the instructor. Consideration of major sociological theorists of the 20th and 21st centuries.

## 475 - Public Sociology (3)

Prerequisite: SOCG 105. Students will be trained on participatory action research methods. Action research is community-based and operates on a collaborative model of social research that simultaneously engages academic practices and democratic social change. Data used may include interviews, focus groups, participant observation, documents, records, reports, and surveys.

## 489 - Special Readings (3)

Prerequisite: Permission of the instructor. Reading and discussion of selected topics from a sociological point of view. Each student focuses on a single topic, though multiple topics may be offered in one semester.

491, 492 - Individual Study and Research $(3,3)$ Prerequisite: Permission of the instructor. Available to qualified students; reading and research, project or paper with guidance of a faculty member.

## 499 - Internship (Credits variable)

Prerequisites: SOCG 105 and six upper-level sociology credits, and permission of the instructor. Supervised off-campus experience, developed in consultation with departmental faculty. Cannot be counted in the major program.

## SPANISH <br> Department of Modern Languages and Literatures

Elizabeth F. Lewis, Chair and Career Advisor

Faculty<br>Professors<br>Ana Garcia Chichester<br>Elizabeth F. Lewis<br>Associate Professors<br>Jeremy G. Larochelle<br>Marisa Martinez-Mira<br>Jose A. Sainz<br>Assistant Professors<br>Maria Laura Bocaz-Leiva<br>Antonia L. Delgado-Poust<br>Marcelo Fajardo-Cardenas<br>Lecturer<br>Martha Patricia Orozco

## The Spanish Program

Through courses in Spanish, students gain proficiency in understanding, reading, writing, and speaking the language. Classes are conducted in Spanish from the beginning levels. Through classroom instruction, individual research, and departmentsponsored organizations, students come to know the varied Hispanic cultures around the world. Experiential learning through individual study, internships, study abroad, and service learning offers students valuable experience outside the classroom. Internships are available to juniors and seniors in local and regional agencies and organizations and in Washington D.C.

Students wishing to major may select from courses in language, literature, linguistics, and culture of Spain, Latin America, and U.S. Latinos. The Spanish program hosts a Language Coordinator from the Universidad de Deusto who spends a year in residence teaching, leading conversation hours, and scheduling special events that promote the Spanish language and Hispanic culture.

UMW has a well-established study abroad program in Bilbao, Spain with the Universidad de Deusto. Students may choose from summer, semester, or year-long courses of study in language, culture, and literature as well as courses in business, economics, and international affairs. Additionally, the
university cooperates with a variety of other overseas study programs in Latin America.

The program also offers courses for students with an interest in environmental studies, business, women and gender studies, digital studies, and in creative writing.

Graduates in Spanish may pursue careers in government or in private fields in which the knowledge of Spanish language and Hispanic culture is essential. Careers that attract language students include education, business, interpreting and translating, research, social services, law and law enforcement, health, and international affairs.

## Requirements for the Spanish Major

Ten required courses in the major include: SPAN 312, 317; two speaking courses from 314,318 , or 415 ; two courses in culture from $315,316,320$ or 370 ; three introduction to literature courses (from 323, 324, 327, or 328); one advanced writing course from 413 or 414; and three electives in literature, culture, or linguistics above 328 (not including SPAN 491, $492,499)$. Experiential learning is fulfilled by taking SPAN 491, 492, 499, or 301 for academic credit, or by an approved community service experience of a minimum of 42 site hours. Community service may be part of the work required in a course or may be volunteer work. Students must conduct their community service in institutions and agencies approved by the Community Outreach and Resources office. To earn credit for experiential learning for community service, students must fill out a Service Learning Contract and submit an evaluation from the institution/agency supervisor to their faculty advisor.

## Business Spanish Minor

The Business Spanish minor is an interdisciplinary program of study that combines courses in Spanish language and Hispanic culture with selected courses in business and/or economics. The Business Spanish minor provides the student has a basic understanding of business and economics as well as the ability to communicate about them in Spanish in a professional context. Students also include a three-credit internship as part of their minor programs. Approved Spanish courses from study abroad programs may also be included among the electives of the Business Spanish minor.

## Requirements for the Business Spanish Minor

A total of nine courses (27 credits) beyond Spanish 202 are required for the completion of the minor. One course in culture from SPAN 315, 316, or 320; two courses in language, SPAN 317 and 318; both advanced courses in business and translation, SPAN 393 and 414; one course from SPAN 499 or BUAD 499 or ECON 499; and one of the following two tracks of Business or Economic courses: Track A) ACCT 101, ACCT 102, and a College of Business course at the 300 -level or higher or Track B) ECON 201, 202, and an Economics course at the 300 -level or higher. Business Spanish minors can take no more than 29 credits in Business without declaring a Business Major.

## Spanish Course Offerings (SPAN)

101, 102 - Beginning Spanish (3) Prerequisite for 102: SPAN 101 or equivalent. Grammar, conversation, reading, laboratory use. Introduction to the elementary aspects of Spanish. Review of elementary Spanish for beginning students of the language. Students with credit for a higher level course in Spanish may not take this course.

## 105 - Intensive Beginning Spanish (6)

Grammar, conversation, reading, laboratory use. Intensive review of elementary Spanish skills before the intermediate level. Students who have taken Spanish 101 are not eligible to take this class. Students with credit for a higher level course in Spanish may not take this course.

## 201, 202 - Intermediate Spanish (3)

Prerequisite for 201: SPAN 102 or 105 or equivalent. Prerequisite for 202: SPAN 201 or equivalent. Grammar review, oral work, reading, laboratory use. Review of Spanish language skills. Two semesters of language study at the intermediate level. Completion of Spanish 202 fulfills the language requirement. Students with credit for a higher level course in Spanish may not take this course.

## 205 - Intensive Intermediate Spanish (6)

 Prerequisite: SPAN 102 or 105 or equivalent. Grammar review, oral work, reading, laboratory use. Intensive review of intermediate Spanish skills. Completion of this course fulfills the language requirement. Students who have taken Spanish 201 are not eligible to take this class. Students with credit for a higher level course in Spanish may not take this course.301 - Study Abroad Reflection (1) Prerequisite: Four-week minimum study abroad program. Follow-up course to a study abroad program to earn credit for experiential learning.

## 310 - Spanish for Native and Heritage Speakers (3)

Prerequisite: SPAN 202 or 205 or equivalent. Class addresses special problems in grammar and spelling. Only open to native and heritage speakers of the language.
312 - Introduction to Literary Studies in Spanish (3)
Prerequisite: SPAN 202 or 205 or equivalent. An introduction to the analysis of literary texts. This course prepares students for reading, analyzing, discussing and writing about texts before taking literature courses in Spanish.

314 - Spanish Pronunciation and Oral use (3) Prerequisite: SPAN 202 or 205 or equivalent. Introduction to phonetics and intensive oral practice above the intermediate level.

## 315 - Spanish Civilization (3)

Prerequisite: SPAN 202 or 205 or equivalent.
Geography, history, and the social, political and cultural background of Spain and the Spanish people.

## 316 - Latin American Civilization (3)

 Prerequisite: SPAN 202 or 205 or equivalent. History, geography, and the social, political and cultural backgrounds of Latin America and the Latin American people.317 -Grammar and Composition (3)
Prerequisite: SPAN 202 or 205 or equivalent.
Studies in grammar and composition.
318 -Grammar and Conversation (3)
Prerequisite: SPAN 202 or 205 or equivalent. Studies in grammar and oral skills.

320 - Topics in Hispanic Culture (3)
Prerequisite: SPAN 202 or 205 or equivalent. Explores cultural issues dealing with the Hispanic culture.

323, 324 - Introduction to Spanish Literature $(3,3)$
Prerequisite: SPAN 202 or 205 or equivalent. Survey of Spanish literature from the Middle Ages to present day.

## 327, 328 - Introduction to Latin American

 Literature $(3,3)$Prerequisite: SPAN 202 or 205 or equivalent.

Survey of Latin American literature from the colonial period to present day.

## 345 - Ideas on Nature in Latin American Literature (3)

Prerequisite: SPAN 312 or permission of the instructor. A study of ideas about nature and environment in Latin American narrative and poetry.

365 - Detective Fiction from Spain and Latin America (3)
Prerequisite: SPAN 312 or permission of the instructor. Study of the genre from representative authors from Spain and Latin America. Focus on issues of social justice and human rights in detective fiction.

370- Caribbean Culture and Literature in the 20th and 21st Centuries (3)
Prerequisite: SPAN 312, 317, 318 or permission of instructor. A study of the culture and literature of the Caribbean region, with a special focus on the Spanish speaking Caribbean.

375 - Spanish Realism and Generation of 1898 (3)
Prerequisite: SPAN 312 or permission of the instructor. Representative authors or themes from 19th-century Spanish Realism and Naturalism through the Generation of 1898 in Spain.

378 - Latin American Poetry (3)
Prerequisite: SPAN 312 or permission of the instructor. A study of representative poetic works from the Renaissance, Baroque, Neoclassic, Romantic, Modernista and/or contemporary periods in Latin America.

383 - Contemporary Spanish Prose (3)
Prerequisite: SPAN 312 or permission of the instructor. Novels and short stories selected from the beginnings of the 20th century to the present.

385 - Latin American Novel (3)
Prerequisite: SPAN 312 or permission of the instructor. Great works from Latin America selected from the period of the Boom and Post-Boom

386 - The Twentieth-Century Spanish American Short Story (3)
Prerequisite: SPAN 312 or permission of the instructor. Collections of short fiction from the avant-garde to present day.

## 388 -Twentieth-Century Latin American

 Drama (3)Prerequisite: SPAN 312 or permission of the instructor. Major dramatists from Latin America.

393 - Business Spanish (3)
Prerequisites: SPAN 317, 318. Study of specialized vocabulary, cultural variances, and their application to business professions.

413 -Advanced Writing (3)
Prerequisites: SPAN 317, 318. Study of composition, grammar, and lexicon at an advanced level with a special focus on creative writing.

414 - Spanish for Translation (3)
Prerequisite: SPAN 317. English-Spanish and Spanish-English translation of texts from different disciplines. Includes studies in history and theory of translation.

415 - Advanced Conversation (3)
Prerequisite: SPAN 318. Oral communication at an advanced level. Students practice conversation skills through individual presentations, group discussions, and other formats.

416 -Topics in U.S. Latino Issues (3) Prerequisite: SPAN 315, 316 or 320 . Issues dealing with the culture and concerns of U.S. Latinos are explored. Topics will vary.
420 - Cinema in the Hispanic World (3) Prerequisite: SPAN 312 or 315 , or permission of the instructor. Selected topics in film.
451 -Cervantes (3)
Prerequisite: SPAN 312 or permission of the instructor. Reading and intensive study of Don Quijote.

## 475 -Hispanic Women Writers (3)

Prerequisite: SPAN 312 or permission of the instructor. Study of women writers from Spain and Latin America.

## 481 - Spanish Seminar (3)

Prerequisite: SPAN 312 or permission of the instructor. Selected topics in literature, culture, and film from Spain.

## 483 - Topics in Spanish Linguistics (3)

 Prerequisite: SPAN 314 or permission of the instructor. Selected topics in linguistics, including phonetics, phonology, and history of the language.
## 485 - Spanish American Seminar (3)

Prerequisite: SPAN 312 or permission of
the instructor. Prerequisite: Spanish 312 or permission of the instructor. Selected topics in literature, culture, and film from Latin America

491, 492 - Individual Study (3, 3)
Intensive study of a topic selected by student in consultation with instructor. By permission of the department.

## 499 - Internship (Credits variable)

Supervised off-campus experience, developed in consultation with a faculty advisor and the office of Career Services.

## THEATRE <br> Department of Theatre and Dance

Gregg Stull, Chair and Career Advisor
Faculty
Professor Gregg Stull
Associate Professors Julie Hodge Helen Housley Kevin McCluskey
Lecturer Cate M. Brewer

## The Theatre Program

The major in Theatre offers students extraordinary flexibility to customize their college experience by choosing courses in the area of theatre in which they are most interested --acting, directing, costume design, scenic design, theatre history and literature, playwriting, lighting design, theatre management, arts management, theatre technology, and costume technology. Through a solid core of foundation courses and an impressive array of electives, students build a major program that allows them to pursue a professional career upon graduation.

Equally important to coursework are the many opportunities available for students to practice in our theatres what they are learning in our classrooms and studios. The Department believes that an experiential approach to theatre education offers the greatest potential of success to the emerging theatre artist. Ours is a hands-on program that emphasizes student leadership and responsibility. In addition to acting on our stages, theatre majors design, direct, build, choreograph, and manage productions in our theatres, as well as serve
other leadership capacities in the Department. Beyond the main stage, students program and manage Studio 115, our flexible black box theatre, producing a season of performances that range in scope from evenings of scenes to fully-produced musicals.

The Department produces in Klein Theatre, a traditional proscenium stage, and the flexible Studio 115 in duPont Hall. Both theatres recently were transformed in extensive renovations that included the installation of state-of-the-art lighting, sound and communications systems. The Department also maintains an acting lab, design lab, craft studio, CAD lab, light lab and fully-equipped costume, lighting, and scene shops, and theatre management offices. Recent productions have included The Tempest, Harvey, Hedda Gabler, Rent, Elegies, A Funny Thing Happened on the Way to the Forum, Goodnight Desdemona (Good Morning Juliet), Proof, A Midsummer Night's Dream, Bat Boy, Sunday in the Park with George, Shakespeare's R\&J, Our Town, Summer and Smoke, The Laramie Project, Antigone, Les Liaisons Dangereuses, Cabaret, Godspell, The Shape of Things, Love's Labour's Lost, Waiting for Godot, Sweeney Todd, As You Like It, Into the Woods, and The School for Wives.

Lectures and performances by visiting scholars and artists enrich the program. In recent years the campus has hosted such artists as James Earl Jones, Michael Kahn, Ming Cho Lee, Susan Tsu, Megan Terry, Richard Schechner, Maria Irene Fornes, Holly Hughes, and Eve Ensler.

The Department mentors majors in career preparation skills by hosting regular workshops to help students develop resumes, headshots, portfolios, and audition materials. In addition to sponsoring internships, members of the faculty accompany students to a variety of events throughout the year where majors can audition and interview with producers for professional opportunities. Our majors graduate with a strong liberal-arts education in the field, as well as with solid skills for working in theatre.

## Requirements for the Theatre Major

Thirty-two (32) credits including THEA 131, $321,361,362$, and 482; either THEA 433, 434, or 436; nine (9) additional credits from Theatre courses except THEA 111, 112, 390, 491, 492,
or 499. In addition, all majors are required to enroll in Theatre Practicum each semester except during the semester of the Senior Project; students may count eight practicum credits toward graduation.

## Requirements for the Musical Theatre Minor ( 24 credits)

THEA 218, 321, 335, and 336; Two (2) credits in THEA 390; Four (4) credits from DANC 121, 122, 141, 142, 301, 302, 305, or 306; Four (4) credits from MUPR 201, 202, 203, 204, 301, or 401.

## Arts Administration Minor

Combining a solid foundation of theory and practice, the Arts Administration minor creates a pathway of the education and experience students need to gain access to a career path in the field. With strong classroom experience in business and arts administration and experiential learning designed to apply knowledge to practice, the minor is a robust and flexible field of study that is an ideal complement to any majors but particularly for students in the arts.

The minor incorporates key courses in accounting, management, and marketing in the College of Business. These concepts are focused on the field in two specialized courses in the Department of Theatre and Dance. Finally, students develop and strengthen their skills by pursuing practicum assignments in essential areas of arts administration to enhance their experience in the minor.

The faculty encourages students to pursue and internship to increase their proficiency in arts administration and establish a network of professional contacts. The University's proximity to the world-class arts organizations in Washington, DC, gives students unprecedented opportunities to work in the field.

## Students interested in the minor in Arts Administration should consult with the Chair of the Department of Theatre and Dance.

[^6]
## Theatre Course Offerings (THEA)

111 - Introduction to Theatre (3)
A course for the general student designed to introduce the various elements of theatrical production.
112 - Introduction to Acting (3)
An introductory course focusing on basic skills, concepts, and methods of modern realistic acting through improvisation and practical exercises leading to formal scene work.

113 - Introduction to Theatre Design (3) A study of design elements and composition principles as they relate to stage scenery, costumes, and lighting. A survey of theatre design today.

131, 132 - Technical Production (4, 4) Theories and techniques of designing, building, painting, and lighting stage settings; organization and operation of production crews. Laboratory.

211, 212 - Dramatic Literature (3, 3) The reading and discussion of selected plays and of theatrical developments as an introduction to the theatre.

218 - Voice and Body Movement (4) Voice and body training to improve vocal quality, articulation, and posture and carriage. Laboratory.
225, 226 - Summer Workshop (1-4, 1-4) Prerequisite: Permission of Department. An intensive course focused on the production of plays and musicals for the student interested in developing professional skills in the theatre. Cross-listed as DANC 225, 226.

240 - Stage Makeup (3)
Techniques and styles of stage makeup for theatre and dance.

## 242 - Costume Construction (3)

An introduction to the principles of pattern development and clothing construction techniques. Projects will include contemporary and period styles. Students will work on costumes for departmental productions. Laboratory.
270, 271 - Special Studies in Theatre (3, 3) Concentration on a single area of theatre for general students. Topics vary from year to year.

## 280 - Stage Management (3)

An introduction to the theory and practice of stage management for the theatre.

281 - Principles of Arts Administration (3)
An introduction to current policies and practices of arts administration.

## 290 - Scene Painting (3)

An examination of the technique and practical applications of painting for the stage.

## 291 - Fabric Modification (3)

An introduction to the basics of fabric dyeing and painting and their specific applications for the theatre.

310 - Fashion History (3)
A survey of clothing, hair styles, and accessories from the ancient world to the present, with particular emphasis on the relationship of fashion to social, political, and economic history.
321, 322 - Acting (4, 4)
Must be taken in sequence. Scene study and performance, creating characters, and ensemble training.
331 -Playwriting (3) Writing for the stage. Exercises and practice in the structure of action, character development, dialogue, critical analysis.
335, 336 - Musical Theatre Performance $(3,3)$ A workshop course in musical theatre performance techniques. May be repeated, but a maximum of six credits may count toward degree requirements.

## 345 -Patterning (3)

Principles of pattern development including flat patterning, drafting and draping, focusing on period styles for the stage.
355 - Theatre Crafts (3)
Exploration of the specialized vocabulary, techniques and tools of the theatre artisan including furniture restoration, welding, upholstery, soft goods and properties creation.
361, 362 - Theatre History and Literature (3, 3) Must be taken in sequence. Theatres, production methods, dramatic conventions, key figures from the Greek period to the present in the Western world.

390 - Theatre Practicum (1) Theatre Practicum earns credit for performance or other work on major productions of the department. A maximum of eight credits may count toward degree requirements.

411 - Acting Styles (4)
Prerequisite: THEA 322. An examination of period style for the stage through scene study and performance.

431, 432 - Directing (3, 3)
Prerequisite: Must be taken in sequence. Technique and practice of directing for the stage.

433 -Lighting Design (3)
Theories and techniques of lighting stage productions; lighting instruments and equipment.

434 - Scene Design (3)
A study of the theories, methods, and techniques used in scenic design.
435 - Ideas in Performance (3)
Prerequisite: Permission of Department. An examination of professional productions of the dramatic literature in Washington and New York. Readings and theatre trips.
436 - Costume Design (3)
A study of the theories, methods, and techniques used in costume and clothing design.

451, 452 - Special Studies in Theatre $(3,3)$ Concentration on a single area of dramatic arts. Topics vary from year to year.

481 - Resource Strategies in Arts Administration (3)
Prerequisite: THEA 281. Approaches to understanding and developing critical needs for arts organizations through case study, analysis, and critical problem solving.

## 482 - Senior Project (3)

Prerequisite: Permission of the Department. This course may only be taken in one of the last two semesters. An independent project in Theatre supervised by a faculty advisor.

491, 492 - Individual Study (1-3, 1-3) Prerequisite: Permission of the Department. Individual study under the direction of a member of the department.

## 499 - Internship (Credits variable)

Supervised off-campus experience, developed in consultation with the department.

## UNDERGRADUATE RESEARCH

Undergraduate Research (URES 197) provides course credit for students who conduct individual or group research as a part of a faculty member's research project. This guided research experience course is open to all students, including first- and second-year students, who meet the qualifications set by the faculty member in charge of the research project.

The URES 197 course differs from the individual study courses (491/492) offered in all departments. When enrolling in individual study, the expectation is that the student is designing and conducting an independent research project in which the faculty member serves as mentor and guide. Individual studies are most often done by more advanced students (juniors and seniors) who have the necessary background to successfully formulate an individual study project.

In the case of URES 197, the student works on the faculty member's research project and completes research tasks connected with that project as determined by the faculty member

Students who complete URES 197 will likely develop their own individual study project at a later time, thereby building on the first research experiences.

All URES 197 projects require that students complete a final report about their work on the research project. The nature of this required final report is determined by the faculty member supervising the research project.

When students take URES 197, the course title listed on the transcript will state "Undergraduate Research in" followed by the name of the academic discipline in which the student worked (for example, "Undergraduate Research in Psychology"). URES 197 courses count as elective credits and do not fulfill major requirements.

## Undergraduate Research Course Offering

 197 - Undergraduate Research (1-3) Prerequisites: Permission of the instructor and the Department. An opportunity for students to engage in directed individual research as a part of a faculty member's research project. This course offers a guided research experienceopen to all students, particularly first- and second-year students. Variable credit - requires 3 hours of work on the research project per week per credit hour. May be repeated once. A maximum of 6 credits in URES 197 courses may be counted toward graduation. Some projects may require a minimum grade-point average or the prior completion particular courses in order for the student to be eligible to participate.

## URBAN STUDIES

Melina Patterson, Program Director
Affiliated Faculty
Jason James, Associate Professor of Anthropology
Leslie Martin, Associate Professor of Sociology
Andréa D. Livi Smith, Associate Professor of Historic Preservation

## The Urban Studies Program

Urban Studies is an interdisciplinary approach to understanding cities, including their historical, social, cultural, economic and political contexts and processes. It includes both theoretical or descriptive approaches to the city and urban life and applied or practical approaches to urban planning, historic preservation and urban policy making. Urban studies also addresses urban problems including housing, education, suburbanization, segregation, gentrification, crime, public space, and others. Urban studies recognizes that cities are distinctive places to live and work and that urban life produces particular opportunities and issues.

The Urban Studies Minor allows University of Mary Washington students to explore the particular dynamics of cities from an interdisciplinary framework. It emphasizes breadth. Students interested in obtaining a minor in Urban Studies should contact the program director or one of the affiliated faculty

## Requirements for the Minor

Eighteen (18) credits to include one introductory class (HISP 209, GEOG 231 or GEOG 237); one research intensive class (ANTH 344; HISP 469; or SOCG 313); IDIS 400; and nine credits (three courses) in electives from a pre-approved list. The electives must be in two different disciplines and at least two must be at the 300-level or beyond.

One 3-credit Individual Study course may be substituted for one of the elective courses with the approval of the instructor and the Director of the minor program. One 3-credit internship can be substituted for one of the elective courses with the approval of a faculty sponsor and the Director of the minor program. One 3 -credit study abroad class can be substituted for one of the elective courses with the approval of a faculty sponsor and the Director of the minor program.

## Electives for Urban Studies Minor

ANTH 344; ARTH 311, 355 and 470U; CLAS 103, 105 and 390; ECON 351, 352, 353 and 354; GEOG 231, 236, 237, 337 and 410Q; HISP 209, 469, 470, and 471VV; HIST 300U, 308, 310 and 471E6; PSCI 332; SOCG 313, 332 and 440. American Studies Seminars (AMST 202 and 303) and special topics classes in Anthropology, Geography, History, Political Science, Sociology, and Economics will count when the topics are relevant and approved by committee.

## WOMEN'S AND GENDER STUDIES

Allyson Poska, Program Director

Affiliated Faculty<br>Tracy Citeroni, Department of Sociology and Anthropology<br>Rosalyn Cooperman, Department of Political Science and International Affairs<br>Jean Ann Dabb, Department of Art and Art History<br>Antonia Delgado-Poust, Department of Modern Languages and Literatures<br>Mindy Erchull, Department of Psychology<br>Susan Fernsebner, Department of History and American Studies<br>Carole Garmon, Department of Art and Art History<br>Surupa Gupta, Department of Political Science and International Affairs<br>Liane Houghtalin, Department of Classics, Philosophy, and Religion<br>Helen Housley, Department of Theatre and Dance<br>Rosemary Jesionowski, Department of Art and Art History<br>Christopher Kilmartin, Department of Psychology

Benjamin LaBreche, Department of English, Linguistics, and Communication
Elizabeth Lewis, Department of Modern Languages and Literature
Miriam Liss, Department of Psychology
Will B. Mackintosh, Department of History and American Studies
Kristin Marsh, Department of Sociology and Anthropology
Jeffrey McClurken, Department of History and American Studies
Kevin McCluskey, Department of Theatre and Dance
Laura H. Mentore, Department of Sociology and Anthropology
Nina Mikhalevsky, Department of Classics, Philosophy, and Religion
Krystyn Moon, Department of History and American Studies
Marjorie Och, Department of Art and Art History
Judith Parker, Department of English, Linguistics, and Communication
Allyson Poska, Department of History and American Studies

Gary Richards, Department of English, Linguistics, and Communication
Jess Rigelhaupt, Department of History and American Studies
Mary Rigsby, Department of English, Linguistics, and Communication
Farhang Rouhani, Department of Geography
Cedric Rucker, Dean of Student Life
Mara Scanlon, Department of English, Linguistics, and Communication
Debra Schleef, Department of Sociology and Anthropology
Gregg Stull, Department of Theatre and Dance
Craig Vasey, Department of Classics, Philosophy, and Religion

The Women's and Gender Studies Program The Women's and Gender Studies major focuses on gender and the experiences of women as central categories of scholarly inquiry. This interdisciplinary program emphasizes diverse perspectives on both the construction and the experience of femininity and masculinity in society, including the complex interactions of gender, class, ethnicity, sexual orientation, and race. Students learn to appreciate the breadth of human experience and the challenges that all people face as gendered beings.

The purpose of the major is to provide students with interdisciplinary breadth; however, students are encouraged to work with their faculty advisors to formulate their course work around issues or themes of particular interest.

## Requirements for the Women's and Gender Studies Major

Thirty-three (33) credits, to include the following (consult relevant sections of this Catalog for course titles and descriptions):

1) Foundation courses (both required): WGST 101, Introduction to Women's Studies, and PHIL 220: Introduction to Feminism
2) Methods course (one required) taken from the following: AMST 201, ARTH 303; ENGL; HISP 205; HIST 299; PSCI 391; PSYC 362; SOCG 364 or 365 . Many of these courses have prerequisites; consult the sections of this Catalog where these course descriptions appear.
3) Electives: Six (6) elective courses taken from at least three (3) different disciplines, reflecting the interdisciplinary nature of Women's and

Gender Studies. One of the electives must emphasize difference in the form of race, class, ethnicity, religion, disability, age, or sexuality. The permanent list of approved electives appears below. An additional list of approved electives will be circulated by the program director each semester.
4) Capstone courses (two required): One capstone experience is an course in an appropriate field of study from an approved list to be provided each semester in which the student will focus his or her class work on issues related to the Women's and Gender Studies major or an independent study (WGST 491). For the second capstone experience, all Women's and Gender Studies majors will design a capstone project (WGST 485) under the supervision of an affiliated faculty member. The student will submit a proposal for approval by a committee composed of the program director, the student's faculty advisor, and another member of the Women's and Gender Studies advisory committee the semester before it is to be completed. The project provides students with the opportunity to engage in the creation of original material and to apply the methods and approaches that they have acquired in the major.

## Women's and Gender Studies Course Offerings (WGST)

101 - Introduction to Women's Studies (3) This course explores questions about sex and gender roles and conceptions of male/female experience. It uses texts and videos from several disciplines, sometimes supplemented by guest lectures.

## 102 - Perspectives in Sexuality (3)

This course is designed to examine the theoretical and social implications of lesbian and gay histories, politics, geographies, cultures, arts, and identities. It is interdisciplinary in scope and content, reflecting upon and drawing from the disciplines of history, psychology, sociology, geography, the arts, literature, and women's studies.

## 485 - Senior Project (3)

Prerequisite: senior status and committee approval of topic. Capstone course involving the in-depth investigation of a subject and creation of original material under close supervision by a faculty member affiliated with the Women's and Gender Studies Program.

491 - Individual Study (3)
Prerequisite: permission of the instructor. Individual investigation of a subject of significance to women and/or gender studies directed by a faculty member affiliated with the Women's and Gender Studies Program. No more than two (2) WGST 491 courses will count towards the major.

## 499 - Internship (1-3)

Supervised off-campus experience, developed in consultation with a faculty member affiliated with the Women's and Gender Studies Program.

## Women's and Gender Studies Electives List

ANTH 212 - Anthropology of Gender
ARTH 460 - Women and Western Art
CLAS 310 - Women in Antiquity
ENGL 243 - Women in Literature
ENGL 327 - Jane Austen
ENGL 353 - Asian American Literature
ENGL 362 - Women of Color
ENGL 369 - Women and Modernism
ENGL 468 - Studies in Feminist Literary
Theories and Criticism
HIST 326 - History of Manhood
HIST 334 - Early Modern European Women's History
HIST 327 - US Women's History to 1870
HIST 328 - US Women's History since 1870
HIST 368 - Gender in Chinese History
HIST 396 - History of Sexuality in the US
HIST 462 - Women in Latin America
IDIS 203 - Introduction to Ethnic Studies
LING 307 - Language and Gender
PHIL 350 - Feminist Theory and Philosophy
PSCI 370 - Women and Politics
PSYC 347 - Psychology of Men
PSYC 349 - Human Sexuality
PSYC 350 - Psychology of Women
RELG 310 - Women and Sexuality in the
Western Religious Tradition
SOCG 304 - Social Stratification
SOCG 315 - Gender and Society
SOCG 331 - The Family
SOCG 400 - Sociology of the Body
SPAN 475 - Hispanic Women Writers
THEA 310 - Fashion History
WGST 102 - Perspectives in Sexuality
WGST 491 - Independent Study
WGST 499 - Internship

## BACHELOR OF LIBERAL STUDIES DEGREE

The Bachelor of Liberal Studies (BLS) degree is designed for adults who want to major in a traditional arts and science discipline and who have at least one of the following characteristics: graduated from high school six or more years ago, is a veteran or active-duty member of the U.S. armed services, is married, has legal dependents other than a spouse, or is financially selfsupporting. Unlike a traditional baccalaureate degree, the BLS offers greater flexibility in the timetable leading to graduation because it does not require full-time study, extended residence at the University or foreign language requirements (unless one majors in a foreign language). A maximum of 90 semester hours of transfer credit may be used to fulfill the requirements for the BLS degree. These credits may include a maximum of 30 credits earned through military service and a maximum of 30 credits earned through a life/ work portfolio. BLS students may choose to major in any one of the more than 30 majors available in arts and sciences or may create a self-designed, interdisciplinary major (subject to the approval of the Bachelor of Liberal Studies Committee). BLS students may also select the new Leadership and Management major. This major is open only to BLS students. The requirements for this program are described in the materials beginning on page 217.

The BLS degree requires a minimum of 120 semester hours, distributed in three categories: general education, major, and electives. Students must also take courses listed as writing intensive and speaking intensive. BLS students generally take courses from among those listed in the College of Arts and Sciences section of the Catalog. In addition, students must satisfy the classroom experience and residential credit requirements listed below. A grade-point average of 2.00 on all work at the University of Mary Washington is also required, with no more than six credits in physical education courses counting toward the degree.

Students who have registered for classes in the B.A./B.S. program at UMW within the past calendar year and who have completed more than 30 credits at the University are not eligible to enroll in the BLS program.

Students are encouraged to complete Liberal Studies 100, Orientation. Others may wish to enroll in Liberal Studies 101, Portfolio Development, for assistance in developing portfolios that document learning gained through life and work for possible conversion to academic credit.

General Education Requirements: The BLS degree general education requirements are as follows; see the list beginning on page 87 for the courses that will meet the various requirements.

Quantitative Reasoning: One course focusing on the role of quantitative information in various settings and the ability to reason abstractly.

Natural Science: One course focusing on the natural sciences and including a laboratory component focusing on the scientific mode of inquiry and the ways in which the natural sciences affect students' everyday experiences and choices as citizens.

Quantitative Reasoning or Natural Science: One course focusing on the role of quantitative information and the ability to reason abstractly, or natural science, or mathematical applications such as computer science, logic or music theory.

Human Experience and Society: Two courses from two different disciplines that explore the forces shaping human activity, relationships, social structures, institutions, and intellectual systems.

Global Inquiry: One course focusing on global interconnections related to economic, political, cultural, social, public health, or environmental issues. An approved study abroad or other field program can fulfill this requirement if it includes a satisfactory evaluation of written reflection of a student's experience in that program by a University of Mary Washington faculty member.

Arts, Literature, and Performance: Two courses focusing on art, literature, or performance, with at least one course focusing on the appreciation and interpretation of artistic expressions. The other course may provide an opportunity for exploring the process of creating artistic work, by pursuing a course in the "process" sub-category, or provide an opportunity for further work (a second course) within the sub-category of "appreciation."

Across the Curriculum Requirements. These requirements may be met by general education, major, or elective courses.

Writing Intensive: Three courses designated writing intensive (WI), which may include English Composition (ENGL 101) or its equivalent.

Speaking Intensive: One course designated speaking intensive (SI).
Major: A student may select from many liberal arts majors offered by the University or create an approved, coherent interdisciplinary concentration from the offerings of at least two departments. At least fifteen credits in the major must be earned at the University of Mary Washington. Students must also earn a grade-point average (GPA) of at least a 2.0 in the major/ concentration area.

Electives: To reach 120 credits, students may take as many as fifty-one credits in electives.

## SECOND DEGREE OR POST-BACCALAUREATE MAJOR

A student who has earned a bachelor's degree from the University of Mary Washington and wishes to pursue further undergraduate work may either complete a post-baccalaureate major and have it noted on the permanent record (with the date of completion) or earn a second degree if it is different from the first degree (for example, a subsequent B.A. if the first degree was a BLS).

Second Degree. The student must apply for admission to the new degree program through the Office of Admissions and must earn at least 30 additional credits at Mary Washington after completion of the first degree. No more than 14 of these credits can be completed prior to matriculation for the second degree. The most appropriate 90 credits will be selected to count toward the
second degree. The student must complete the major program and General Education requirements in the Academic Catalog in effect at the time of matriculation into the second degree.

A student who earned his or her first degree from another institution must enter Mary Washington as a transfer student, then complete the major program and general education requirements of the second degree as defined in the Academic Catalog in effect at the time of matriculation into the second degree.

Post Baccalaureate Major. A student who has earned a degree at UMW who is completing only an additional major must complete the major program requirements printed in the Academic Catalog at the time of major declaration if the student has not discontinued enrollment at UMW for more than two semesters. A student returning after an absence of more than two semesters will be required to complete the major program requirements listed in the Academic Catalog in effect at the time of re-enrollment. A BLS student must apply in the BLS Office.

## PORTFOLIO CREDIT (CREDIT FOR LIFE/WORK EXPERIENCE)

The portfolio system is designed to award college credit for applicable college-level learning acquired through nonacademic experiences. Portfolio credit is available to students enrolled in the Bachelor of Liberal Studies (BLS) program. Students in the Bachelor of Arts or Bachelor of Sciences degree programs are not eligible for portfolio credit. Learning documented in the portfolio must be equivalent in scope and complexity to what students learn in college classrooms. Hence, the portfolio system is a way of recognizing experiential learning, which is generally equivalent to college classroom learning. All credit earned through portfolio assessment must be measurable or verifiable by a qualified, formally-appointed assessor; such credit is considered transfer credit.

While a great deal is learned from life's experiences, e.g., marriage and parenthood, these experiences do not automatically translate into college credit; a portfolio must present what a student has learned in such a way that the assessor can identify and measure it. While most adults can do a great many complex things-such as complete income tax forms, balance checkbooks, and vote for presidential candidates-the University does not award college credit for typical adult competencies.

Individuals who wish to present a portfolio must be enrolled at the University as BLS degree-seeking students. In addition, they are required to enroll in and satisfactorily complete BLST 101, Portfolio Development, prior to presenting the portfolio for assessment. This course carries one pass/fail credit and is offered on an as-needed basis. The course defines the kind of learning a portfolio can present successfully, provides a detailed outline of the portfolio
format, and offers each student specific instruction in the assembly of the initial stages of his/her portfolio. It also outlines additional methods, other than the portfolio, for providing documentation of experiential learning for college credit.

The usual ceiling for portfolio credit awards is 15 credits; in exceptional cases the award can be as high as 30 credits. Thirty is the maximum number of credits that can be awarded through the portfolio, and applied toward the degree. Due to the nature of the program and changing technologies, students currently enrolled in the BLS program should not include knowledge and experiences older than 10 years; exceptions are considered on an individual basis. Students may submit as many portfolios as they like, and each one is not to exceed 250 typewritten pages. The assessment fee for each portfolio is $\$ 100$. Portfolios must be submitted prior to accumulating 90 semester hours of transfer credit.

Portfolios must be submitted to the BLS Office within 12 months of completion of the portfolio course, and must be submitted prior to the student's final semester in the degree program. Credits awarded may be used to satisfy general education requirements, elective credit requirements, and selected major credit requirements.

Because there is a significant amount of work involved in preparing a portfolio with no guarantee of a successful outcome, students should discuss the project at some length with their faculty advisors and with the BLS Office (Lee Hall, Room 437). If the decision is made to pursue credit awards through the portfolio process, permission to enroll in BLST 101 must be secured from the BLS Office.

## TRANSFER CREDIT

The transfer credit total for the Bachelor of Liberal Studies degree - including a combination of credits from other accredited institutions, standardized tests, portfolio, military, CLEP and ACE - cannot exceed 90 semester credits. Contingent on an evaluation of course content, transfer credit may be used to satisfy general education, concentration, or elective credit requirements.

The University accepts many of the College Level Examination Program (CLEP) and DANTES Subject Standardized tests as undergraduate transfer credit. Students may earn credit by meeting the minimum required score on selected CLEP or DANTES tests; these credits may be used to fulfill general education and other requirements or as elective credits. The Bachelor of Liberal Studies degree program follows American Council on Education (ACE) recommended guidelines for CLEP and DANTES exams as minimum scores for granting credit. A maximum of 30 credits by examination may be counted toward the degree. Students should consult the BLS Office for information on specific CLEP or DANTES exams that are accepted by the University. CLEP
tests are administered at local universities. DANTES exams are offered only on military installations.

## ACADEMIC RESOURCES, POLICIES, AND REGULATIONS FOR BLS STUDENTS

BLS students have access to all the academic resources outlined in the section of this Catalog beginning on page 39. The University Academic Policies described in the section beginning on page 53 apply to BLS students.

## LEADERSHIP AND MANAGEMENT

# Bachelor of Liberal Studies Program 

Ana Garcia Chichester, Program Director

## The Leadership and Management Major

Leadership and Management is a multidisciplinary major only open to students in the Bachelor of Liberal Studies Program. Students pursuing a B.A. or B.S. degree may not declare this major.

The major in Leadership and Management provides students with basic management skills. The course of study is organized to produce effective and intellectually agile leaders. Students gain advanced critical thinking skills, firm ethical reasoning abilities, and a readiness to participate productively in the workplace and the community.

Business administration courses within the Leadership and Management major introduce students to central theoretical issues regarding management organization and processes within business, industrial, and governmental environments. Additional courses are grounded in liberal arts disciplines recognized by employers as crucial to career growth.

The category of courses in Ethical issues helps guide students in decision making and requires them to evaluate the consequences of managerial choices. Organization and Government allows the student to gain knowledge about the structures of private and public systems. Leadership and Communication guides the student's skills in the communication and understanding of those systems. Through courses in Leadership and Diversity students learn about the populations that managers must engage and to which they must communicate effectively.

A capstone course encourages students to conduct research through an individual study experience guided by a faculty mentor and/or to complete an internship in a subject appropriate to the major and under the guidance and direction of a faculty advisor and an agency supervisor.

## Requirements for the Leadership and Management major

Thirty-nine (39) credits to include the following (consult the relevant sections of this Catalog for course titles and descriptions).

1. Required Courses ( 27 credits): BPST 314; CIST 301; LRSP 201, 311, 316, 344, 406, 412; and one of the following: LRSP 460, BLST 491, or BLST 499.
2. One course, minimum, for each category (below):
A. Ethics and Diversity ( 3 credits): CPSC 302; ECON 332, 351, 352, 354; ENGL 206, 243; GEOG 331; HIST 313, 314, 315, 327, 328, 384; IDIS 203; PHIL 160, 225; PSYC 333, 347, 350; RELG 101, 276, 305, 317; SOCG 304, 315, 341, 421.
B. Organization and Government ( 3 credits): ECON 202, 311, 312; EESC 321, 330,;FREN 313; GEOG 338; GERM 313; PHIL 100, 210; PSCI 201, 202, 311, 312; PSYC 301, 385, 386, 387; SPAN 393.
C. Leadership and Communication ( 3 credits): COMM 205, 206, 208, 209, 350, 351, 352, 354, 356; CPSC 103, 104, 105, 106, 310, 348, 350; ENGL 200, 202V, 300; LING 101, 202, 301; PHIL 151; THEA 218, 261.
3. Additional Elective: 3 additional credits from Ethics and Diversity, Leadership and Communication, and Organization and Government.

NOTE: A maximum of 27 credits can be in business-related courses: Any ACCT, BLAW, BUAD, DSCI, FINC, MKTG, MGMT, MIST, CIST 101, LRSP 305, 306, 311, 331, 343, 344, $406,407,412,433,434,435,460$, BPST 314, 316, any 471.

## Bachelor of Liberal Studies course offerings (BLST) <br> 100 - Orientation (1) <br> An introduction to the BLS program, study skills, time management, library use, and common issues facing adult students. Open only to BLS students.

101 - Portfolio Development (1)
Techniques for identifying, defining, and presenting experiential learning for assessment. Open only to BLS students.

## 491 - Individual Study (3)

Prerequisites: Admitted to the Bachelor of Liberal Studies program for at least one semester. Students must have earned 90 credits and have completed 12 UMW credits in good standing. Individual investigation of a subject appropriate to the major and directed by a member of the faculty. This individual study option is only available for Bachelor of Liberal Studies students pursuing an approved selfdesigned or an interdisciplinary BLS major. The registration form must be signed by the directing faculty member and by the Director of the Bachelor of Liberal Studies program.

## 499 -Internship (3-6)

A supervised work experience directed by a member of the faculty in consultation with an agency supervisor. This internship option is only available for Bachelor of Liberal Studies students pursuing an approved self-designed or an interdisciplinary BLS major. Students must contact the Office of Academic and Career Services to complete the required contract in order to register, and must follow all internship program guidelines set forth by that Office.

## Professional Studies course offerings (BPST)

311 - Critical Thinking, Research, and Presentation (3)
Prerequisite: English Composition 101 or equivalent. This course focuses on academic writing, scholarship, and presentation. Critical thinking and research skills as they apply to academic discourse are stressed. Further, students study argument with a focus on Aristotle, as well as Toulmin and Rogerian logic. Students apply their critical analysis, research, and argumentative skills in the production of a number of written documents such as literature reviews, abstracts, white papers, and case studies. In addition to individual writing and speaking assignments students take part in a collaborative written project and presentation. Throughout the course, students use and become increasingly familiar with resource materials within their academic discipline and perform a significant amount of secondary research using professional and academic journals.

## 312 - Technical and Business <br> Communication (3)

Prerequisite: English Composition 101 or equivalent. ATC Designation: Writing Intensive and Speaking Intensive. Students delineate the importance of effective professional written and oral communications skills. Students analyze examples of workplace writing, including memos, letters, technical and professional documents, reports, and proposals, and develop skills in understanding, editing, revising, and creating appropriate written materials. Students also learn the elements of conceptualizing, researching, and writing an academic paper, including appropriate use of the American Psychological Association (APA) format. Students study the importance of effective oral communication and delineate the impact of power, position, age, ethnicity, culture, and gender on interpersonal, group, and organizational communications. Students also demonstrate proficiency in the development of individual and group oral presentations employing presentation graphics software.

## 314 - Business Legal Environment (3)

Students examine a broad spectrum of legal principles as they relate to business organizations. Students study the critical nexus between law and the environment in which business operates. Students analyze the creation of rights, liabilities, and regulations under the law as expressions of societal forces. The course addresses the legal aspects of business agreements and relationships. Subjects covered include constitutional law, dispute resolution, contracts, torts, product liability, and property issues. Students study the different forms of business organizations available and the fiduciary duties of officers, directors and shareholders. The legal aspects of the employment relationship as they relate to protection of trade secrets, agency, discrimination, and wrongful termination are also covered. Students analyze relevant legal cases and statutes to learn the impact of law on organizations. (Credit is not granted for both BPST 314 and ACCT 303.)

471 - Special Topics (3-6)
Prerequisite: Topic dependent. Elected topics that reflect faculty specialization or program needs. Topics may include areas related to BPS core topics. May be repeated for credit with a change in topic.

491 - Directed Study (1-6)
This is an individual study under faculty direction on a topic of relevance to the BPS core area.

## 499 - Internship (1-6)

Internships offer students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training.

## Computer Information Systems course offerings (CIST)

## 299 - Introduction to Computer Information

 Systems (3)This course provides a foundational knowledge base for students in computer information systems. Topics include file structures, pseudocode, algorithms, and basics in procedural and object-oriented programming. The operating systems component includes reviews of popular operating systems, file management, and computer hardware. The Internet component introduces infrastructure of the Internet, electronic mail, FTP, creating web pages using HTML, and basics of e-business and e-commerce.

301 - Business Information Systems (3) ATC Designation: Global Inquiry. This course covers how organizations can use information systems strategically to reengineer business processes. Topics include theories, principles, and business cases about a variety of business applications supporting different organizational levels and functions.

## 304 - Computer Information Systems

Programming I (3)
Prerequisite: CIST 299 or equivalent. This course is an introduction to the implementation of business applications using structured and object-oriented logic for business systems. Emphasis is on problem solving, report generation, and programming skills for business applications. Topics include basic controls and events, operations and built-in functions, input and output procedures, menus and multiple form applications, principles of programming elements, graphical user interface design, and database transactions.

305 - Computer Information Systems Programming II (3)
Prerequisite: CIST 299 or equivalent and CIST 304. This course covers effective modeling techniques using a standard modeling
programming language. Students learn to model and create special applications in spreadsheets to support business processes and decision making. Students also develop customized programming solutions and gain the skills necessary to develop macros, format worksheets, create user-interactive macros, and perform calculations.

## 401 - Database Systems (3)

Prerequisite: CIST 299 or equivalent. The course focuses on the principles of relational database design and data management. It covers application development in a database environment including evaluation, installation, maintenance, and administration of relational databases. The role of databases in the business environment is covered in detail with an advanced introduction to the concepts for modeling, designing, querying, and managing large databases.

## 406 - Data Communications and

 Networking (3)Prerequisite: CIST 299 or equivalent. Topics covered in this course include data communication technologies; the role of data communication in business; computer networks and data communication architectures; network protocols and topologies; technical challenges underlying the integration of data communication technologies for business process improvement; concepts of local area network and wide area network management; network program interfaces; and emerging computer network applications. Emphasis is placed on the use of networks and data communications to support business applications and their associated information systems.

## 425 - Systems Analysis (3)

Prerequisite: CIST 299 or equivalent. This course introduces the concepts and theory that underlie business processes from a systems analysis perspective. The course covers principles, methods, techniques, and tools to guide and assist in the processes of systems analysis and design. Topics include technical aspects such as data modeling and organizational and human aspects of a systems analysis.

426 - Managing Emerging Technologies (3) Prerequisite: CIST 299 or equivalent. Students learn to compare and contrast established and emerging technologies and to identify common difficulties faced by managers making the transition from one to another. Students
examine the technology management process related to emerging technologies, including assessment of market potential, development of management strategies, review of financial obligations and trade-offs, and the potential impact on organizational mission and culture. Students are exposed to theory and practice in an area that demands rethinking of traditional practices in all management functions.

## 440 - Computer Information Security (3)

This course equips students with a sound knowledge of the underlying principles of information security and provides them with the skills needed to analyze and evaluate information security problems, intrusion detection, firewalls, operational security, physical security, legal issues, steganography, and Internet security. Students explore security policies and models, cryptography, security in distributed systems, and malware prevention disaster recovery techniques. An emphasis is placed on current issues, future directions, and research areas of information security. (Credit is not awarded for both CIST 440 and MMIS 540.)

441 - Network Security and Cryptography (3) Prerequisite: CIST 440 or equivalent. Topics include fundamentals of network security, security threats and vulnerabilities, viruses, cryptography, digital signatures, and key certification and management. In addition, this course covers areas such as access control, authentication, intrusion detection, firewalls, and virtual private networks. Wireless and mobile network security is covered in detail. (Credit is not awarded for both CIST 441 and MMIS 541.)

## 442 - Security Policy, Planning, and

 Assurance (3)Prerequisite: CIST 440 or equivalent. This course covers policy, legal systems, ethical issues, physical security, disaster recovery, business continuity issues, and risk in information systems. Topics also include maintenance of essential business processes following a disaster, restoration of systems, assurance, and building systems with formal evaluation methods. (Credit is not awarded for both CIST 442 and MMIS 542.)

## 443 - Computer Forensics (3)

Prerequisite: CIST 440 or equivalent. This course introduces the student to computer forensics, use of technology to obtain evidence for court depositions and cases, responses to a variety of information systems incidents
in organizations, and tools with hands-on approaches to solving such incidents. This course teaches students how intruders breach the infrastructure, how to identify compromised systems, and approaches for developing remedies for such breaches. Topics include file creation, modification, access, downloads, and communications. (Credit is not awarded for both CIST 443 and MMIS 543.)

## 444 - Ethical Hacking and Malware Analysis (3)

Prerequisite: CIST 440 or equivalent. This course introduces students to penetration testing methods that can be used in an ethical hacking situation. Students learn in interactive environments where they scan, test, hack and secure their own systems, and gain experience with essential security systems. Topics include perimeter defenses, scanning and attacking students' networks, escalating privileges, and steps to secure a system. Students learn about intrusion detection, policy malware, DoS and DDoS attacks, buffer overflows and virus creation. (Credit is not awarded for both CIST 444 and MMIS 544.)

461 - Project Management for IT (3) Prerequisite: Minimum of 18 credits in CIST course work or permission of instructor. This course covers methods for the analysis, design, and implementation of information technology projects from a project management and information systems perspective. Topics include investigating hardware and software needs, cost estimating, scheduling, and human resource management. Students are required to design feasibility plans based on current research. Principles, methods, tools and techniques available to assist managers in planning, implementing, and controlling projects are also discussed. Practical projects and the implications for managers are addressed.
471 - Special Topics (3-6)
Prerequisite: Topic dependent. Selected topics that reflect faculty specialization or program needs. Topics may include simulation techniques, parallel processing, and artificial intelligence. May be repeated for credit with a change in topic.

## 490 - IT Research Project (3)

Prerequisite: Minimum of 18 credits in CIST course work or permission of instructor. Students select, propose, and write a research paper on a topic related to computer information systems. The study may include
data collection from actual field observations and is substantiated with a current literature review. The course culminates with an oral presentation accompanied by visual displays and a research paper.

## 491 - Directed Study (1-6)

Prerequisites: Senior standing and permission of Associate Dean for Faculty. This is an individual study under faculty direction on a topic of relevance to the Computer Information Systems concentration.

## 499 - Internship (1-6)

Prerequisites: Permission of internship director and Associate Dean for Faculty. Internships offer students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training. Interested students should contact the Associate Dean for Faculty for additional internship information.

## Leadership and Management course offerings (LRSP)

## 201 - Accounting for Managers (3)

This course covers financial accounting concepts and provides an introduction of managerial accounting concepts. Emphasis is placed on understanding how economic transactions impact financial statements. The accounting equation model as well as the financial statements model is used for this purpose. Vertical analysis, horizontal analysis and ratios are used to evaluate a company's performance. Managerial accounting is introduced and contrasted with financial accounting. Topics include: the accounting equation, elements of financial statements including public disclosures of Notes to Financial Statements and Management Discussion and Analysis, filings with the SEC, financial ratios and analysis well as budgeting. (Credit is not granted for both LRSP 201 and LRSP 302 or LRSP 201 and ACCT 201.)

## 302 - Financial and Managerial Accounting Policy (6)

Applies and integrates financial and managerial accounting policy in a management framework. Emphasis is placed on using accounting data to make managerial decisions and assess performance. Leadership and management aspects of accounting are consider ed. Topics include: Generally Accepted Accounting

Principles- Generally Accepted Auditing Standards and Statements on Management Accounting- cost-volume-profit relationships-activity-based costing- operational and capital budgeting- and financial statement analysis. 305 - Public Sector Management (3) This course provides an overview of the theoretical foundations, structures, and processes of public and nonprofit organizations, as well as their historical development and socioeconomic environment, and the complexities of managing in public and nonprofit organizations.

311 - The Management Process (3) This course examines management theory and practice as a unified body of knowledge. The course covers historical development of management theory, the nature and purpose of organizations, and the functions, strategies, structures, and a sampling of challenges facing management in contemporary organizations. Emphasis is placed on the roles of executives managing organizations, improving their performance, and achieving desired operating results. Experiential exercises, cases, and other strategies are applied to enhance learning the theory, and to acquire, enhance, and integrate key management skills related to managing contemporary work organizations.

## 316 - Quantitative Methods and Statistics

 Modules (3)The ability to work with and effectively use quantitative data to make decisions is a fundamental skill in every management function. This course will provide students with fundamental quantitative skills for analyzing data and making good decisions. Specifically, this course will provide a fundamental understanding of probability and develop skills in quantitative problem structuring, basic forecasting methods, and basic optimization techniques for planning and resource allocation. (Credit is not granted for both BPST 316 and LRSP 316)

## 331 - Organizational Behavior (3)

 This course explores human behavior in work organizations from the perspective of a practicing manager. Individual and group behavior are examined as critical factors in developing ethical work practices, with special attention being given to effective, successful communication, motivation, leadership, and organizational culture. Assessments of internal and external environments are studied as they relate to interpersonal skills and needs in adynamic world. (Credit is not granted for both LRSP 331 and LRSP 301.)

## 343 - Leadership Theory and Practice (3)

This course involves study of contemporary leadership theory, with emphasis on practical application of those theories. Characteristics of effective leaders, contemporary leadership models, strategic leadership, ethics, power, politics, influence tactics, teamwork, motivation and coaching skills, creativity and innovation, communication, and conflict resolution, are discussed. Students have opportunities to explore personal leadership styles, learn how to modify them, how to apply them effectively in their work, and write a personal vision statement. Experiential exercises, cases, and other strategies are applied to enhance learning theory and acquire, enhance, and integrate leadership skills related to leading contemporary work organizations. (Credit is not granted for both LRSP 343 and LRSP 301.)

## 344 - Financial Management (3)

Prerequisite: ACCT 201 or equivalent. This course studies financial management, with an emphasis on using the financial statements and other financial data to make decisions to improve the organization's economic performance. Topics include financial management principles and concepts, financial risk, working capital management, time value of money, cost of capital, stock and bond valuation, and the financial regulatory environment.

## 406 - Human Resource Management (3)

 This course examines the principles and practices of human resource management, including recruiting, hiring, orienting, training, developing, disciplining, rewarding, and recognizing employees. The evolving strategic role of human resource professionals and HR practices are delineated and discussed. (Credit is not granted for both LRSP 406 and LRSP 405 or LRSP 430.)407 - Employment Law (3)
Prerequisite: BPST 314 or equivalent. This course emphasizes federal employment statutes including Title VII, Fair Labor Standards, Americans with Disabilities Act, Family and Medical Leave Act, Age Discrimination in Employment Act, and other federal statutes. Cases are used to illustrate the various federal courts' interpretation of the federal statutes. Federal agencies such as Equal Employment Opportunity Commission and Department of Labor and their guidelines are also studied.
(Credit is not granted for both LRSP 407 and LRSP 405 or LRSP 431.)

## 412 - Marketing for Managers (3)

From a marketing manager's perspective, this course builds upon the foundation of marketing knowledge found in the classical strategic factors of price, product, place, and promotion. In addition, contemporary competitive factors of quality, speed, innovation, and customer service are considered. Additional topics include service strategy, development of service systems, differentiating services from products, the role of the Internet, and the application of key marketing concepts to a variety of profit and nonprofit organizations. Attention is given to developing a knowledge base of fundamental marketing research techniques, a basic understanding of free market economics, and the importance of marketplace information to marketing practices. (Credit is not granted for both LRSP 412 and LRSP 404 or LRSP 410.)

433 - Production/Operations Management (3) Prerequisites: BPST 316 and LRSP 305 or LRSP 311 or equivalents. This course examines current concepts and methods of managing operations and production for the manufacturing and service industries. It presents quantitative and qualitative techniques for product and service design, process analysis, job design and measurement, facility layout, waiting line management, material and customer requirements, control, and scheduling. This course also explains concepts and models of supply chain management and total quality management focusing on Six Sigma.

434 - International Management (3) Prerequisites: LRSP 311 and LRSP 412 or equivalents. This course studies the role of managers in global markets and international organizational settings. Topics in this class include the following areas: the external economic and political environment, international strategic planning, partnerships and alliances, global human resource management, managing technology, product and service design, and ethics and leadership as a global manager. This course utilizes innovative learning techniques and case study analysis from a variety of national, multinational, and global firms. (Credit is not granted for both LRSP 434 and LRSP 350.)

435 - Leadership, Innovation, and Creativity (3) Prerequisite: LRSP 331 or LRSP 343 or equivalent. This course focuses on the role of leaders in developing an innovative organization and managing creative employees. Topics include the creative/innovation process, management of innovation, and the individual and team based skills necessary for organizational success in an increasingly global, competitive environment. (Credit is not granted for both LRSP 435 and LRSP 310.)

460 - Leadership Strategy and Policy (3)
This course studies the formulation and direct application of strategy at the business and corporate levels. Emphasis is given to the role of leadership in strategic planning and thinking. Through the use of a variety of instructional techniques, e.g., computer-based simulations and case studies, students learn to make critical leadership decisions concerning organizational policy, competitiveness, operational and marketing tactics, and the role of corporate governance while addressing ethical considerations. (Must be taken during final semester of enrollment in the program. Credit is not granted for LRSP 460 and LRSP 461.)

471 - Special Topics (3-6)
Prerequisite: Topic dependent. Selected topics are reflective of faculty specialization or program needs. The purpose of this course is to provide opportunities for concentrated study or to equip students with specialized knowledge and competencies that are required of leaders. May be repeated for credit with a change in topic. 491 - Directed Study (1-6)
Prerequisites: Senior standing and permission of Associate Dean for Faculty. This is an individual study under faculty direction on a topic of relevance to the leadership and management concentration.

499 - Internship (1-6)
Internships offer students opportunities to experience various fields of employment while working with a variety of organizations on important and challenging projects. These experiences augment classroom learning while allowing on-the-job training. Interested students should contact the Associate Dean for Faculty for further information about internship opportunities.

## BACHELOR OF NURSING DEGREE

## Pamela McCullough, Program Director

Program Mission. The BSN Completion Program is a post-licensure degree program administered by the College of Arts and Sciences. The program's curriculum combines the University's mission with the recommendations contained within the Essentials of Baccalaureate Education for Professional Nursing Practice by the American Association of Colleges of Nursing (AACN). Along with seven higher-level nursing courses, the program will continue the UMW tradition of liberal arts education by including three liberal arts courses. The program will enhance the writing, critical thinking, and speaking skills of RNs whose focus is the delivery of direct patient care and prepare them for lifelong learning and professional creativity.

Students will be mentored by university faculty and nursing leaders in the community to identify and improve the delivery of patient care through the use of nursing research and evidenced-based practice. Program graduates will be able to practice nursing within a complex healthcare system and assume the roles of care provider, designer, manager, and coordinator of care. In addition, students will be prepared to continue their nursing education to the graduate level.

The UMW BSN Completion Program Curriculum. The BSN Completion Program's curriculum is designed for RNs. All applicants are required to have completed either an accredited associate degree program or a diploma program prior to being admitted to the program. All entering students must hold a current, unencumbered RN license which permits them to practice nursing in the Commonwealth of Virginia.

The BSN Completion Program teaches RNs professionalism; the importance of inter-professional teams; healthcare policy, finance and regulation; patient-centered care; cultural sensitivity; health promotion and disease prevention; the impact of genetics on health risks; the use of evidenced-based practice, leadership principles and knowledge gained from a liberal education for clinical decision making, patient safety, and quality improvement; the use of technology and informatics in healthcare; life-long learning and practice across the lifespan.

The UMW BSN Completion Program Expected Student Outcomes. Graduates of the BSN Completion Program will:

1. Examine the concepts of professionalism and fundamental beliefs to nursing, which include the inherent values of altruism, autonomy, human dignity, integrity, and social justice.
2. Create intra- and inter-professional partnerships, characterized by teamwork, collaboration, and communication to deliver high-quality, safe patient care.
3. Evaluate healthcare policy and finance and regulatory practices
to influence the allocation of health resources in order to reduce health disparities.
4. Utilize the nursing process when practicing caring, competent, holistic, and patient-centered nursing care with individuals, families, groups, communities, and populations from diverse backgrounds in a variety of settings across the lifespan.
5. Evaluate nursing research to determine best practices and translate current evidence into professional nursing practice.
6. Formulate plans of care which promote health and prevent disease for individuals, families, groups, populations, and communities in complex situations.
7. Synthesize a liberal arts education, knowledge of nursing science, and critical thinking skills to support independent and interdependent decisionmaking in the practice of professional nursing.
8. Demonstrate leadership knowledge, skills, and attitudes by promoting safe, high-quality care with a focus on continued evaluation and improvement within a variety of health organizations and systems.
9. Utilize information management knowledge and skills by employing technology and information systems to create safe patient care and enhanced decision-making in a variety of health organizations and systems.

Accreditation. The University of Mary Washington requested applicant status to the Commission on Collegiate Nursing Education (CCNE) during the summer semester of 2014. New applicant status signifies an affiliation with CCNE. The CCNE on-site evaluation is scheduled to occur February 2016. the CCNE accreditation decision will be retroactive to the first day of the program's on-site evaluation.

Requirements for the BSN Degree. As for other UMW undergraduate programs, 120 credits are required for the degree. In addition, a minimum of 30 credits need to be completed at UMW. A cumulative GPA of 2.00 on all UMW work is required. The BSN degree credits are distributed in the following requirement categories.

30 Credits: BSN Completion Program Courses which must be taken at the University of Mary Washington. These three credit courses are: ENGL 306Q; NURS 310, 320, 410, 420, 430, 490, 510; PHIL 226; and one social science course from the following list: ANTH 211Anthropology of Race; ANTH 212 Anthropology of Gender; ANTH 371GG Medical Anthropology; PSYC 301 Social Psychology; SOCG 304 Social Stratification; SOCG 315 Gender and Society; SOCG 331 the Family; SOCG 334 Medical Sociology; SOCG 335 Global Issues in Health and Illness; SOCG 371U Death and Society; SOCG 400 Sociology of the Body; SOCG 421B Race and Ethnic Relations.

Students are encouraged to take additional courses from this list to obtain the 120 credit requirement for degree completion.

## 27 credits: General Education credits transferred from a pre-licensure nursing program.

Sciences - 12 credits, to include Anatomy and Physiology
English Composition - 6 credits
Social Science - 6 credits
Humanities - 3 credits
3 credits: Prerequisite course for NURS 410 and NURS 430.
MATH 200 (Introduction to Statistics) or equivalent - 3 credits
41 credits: Copy of a current and valid unencumbered license to practice nursing ( RN ) in the Commonwealth of Virginia.

19 credits: Open Electives (language study is highly recommended)

## UNIVERSITY OF MARY WASHINGTON AND GERMANNA COMMUNITY COLLEGE NURSING PROGRAMS ACADEMIC PARTNERSHIP

The University of Mary Washington (UMW) and Germanna Community College (GCC) recognized the need for registered nurses (RNs) to achieve baccalaureate degrees in nursing through an improved education system which promotes seamless academic progression. Therefore the two nursing programs created an Academic Partnership and adopted two plans which lead to a BSN.

Dual Nursing Degrees Plan ( $1+2+1$ )
This agreement is designed for UMW students who are interested in earning a pre-licensure Associate of Applied Science (A.A.S.) degree in nursing from GCC and a post-licensure Bachelor of Science in nursing from UMW if all degree requirements are met. (see Requirements for the BSN Degree section.) Students will be admitted to UMW as Pre-BSN student and also need to apply to GCC as a student. The following is a general description of each year. If a student needs to repeat a course, or submits an application to the GCC Nursing Program for a later term, the student's progression will be delayed and the two degrees will not be completed in the " $1+2+1$ " timeframe.

Year 1: During the freshman year students will complete required liberal arts and nursing prerequisite courses at UMW and GCC if needed. Students must earn a "C" or above in all courses taken at GCC to be transferable to UMW. Students who live on campus will use their UMW address to qualify for GCC residency requirements. UMW students who elect to live off campus must claim residency in one of the following areas: Culpeper, Madison, Orange, Spotsylvania, Stafford, Fredericksburg, Caroline, or King George. Students must provide their own transportation to GCC throughout the program to include prerequisite courses, nursing courses, nursing labs and clinical assignments; therefore students will be allowed to have a car on campus as a freshman student. Students will apply for a second admission to the GCC Nursing Program. Students must meet all published procedures and deadlines for application to the GCC Nursing Program. Pre-licensure nursing
programs are competitive and there is NO guaranteed acceptance to the GCC Nursing Program. Nursing is a caring profession. GCC and UMW reserve the right to deny or revoke admission to the GCC Nursing Program and/or the BSN Completion Program to students who have been suspended or dismissed from any institution of higher education or convicted of a felony, use of illegal substances, or on charges related to physical abuse towards others.

Years 2 \& 3: Students who are admitted to the GCC Nursing Program will attend GCC's Nursing Program and earn an A.A.S. degree in nursing. Students will be concurrently enrolled in UMW courses and complete the three liberal art courses which are part of the BSN Completion Program, and additional electives to reach the 120 credit degree requirement. Students will be able to continue their UMW student life (e.g. campus residence life and campus dining) while completing the GCC Nursing Program.

Year 4: Students will return to UMW to finish the BSN Completion Program during the fourth year. Students may begin taking UMW courses which begin with the NURS prefix after they present a current and valid unencumbered license to practice nursing (RN) in the Commonwealth of Virginia. Students submit a copy of their licensure to the BSN Completion Program office and complete a major declaration form. Both documents are submitted to the Office of the Registrar and each licensed student will receive 41 credits. NUR courses from GCC do not transfer in individually. Students have 2 years, following graduation with an A.A.S. degree in nursing, to complete the fourth year at UMW.BSN Concurrent Enrollment Plan (BSNCE)

This agreement permits GCC nursing students to be concurrently enrolled in the BSN Completion Program while completing an Associate of Applied Science (A.A.S.) degree in nursing. When students are accepted into the GCC Nursing Program, they, upon student request, will be granted admission into the BSN Completion Program as Pre-BSN students if they complete a Letter of Intent and have a GPA of 3.0 on a 4 point scale. Concurrently enrolled UMW/GCC nursing students may complete the three liberal arts courses included in the BSN Completion Program during summer sessions. Students may begin taking UMW courses that begin with the NURS prefix after presenting a current and valid unencumbered RN license to practice nursing in the Commonwealth of Virginia. Students will receive 41 credits upon presenting current and valid unencumbered RN license to practice nursing in the Commonwealth of Virginia to the BSN Completion Program office and complete a major declaration form. Both documents are submitted to the Office of the Registrar.

## TRANSFER CREDIT

The transfer credit total for the BSN degree cannot exceed 90 semester credits. At least 30 credits must be taken at the University of Mary Washington
after admission to the program. The holder of an associate's degree may receive up to 60 credits, in addition to the 30 credits for R.N. licensure, toward the BSN degree based on transcript evaluation. The holder of a Nursing Diploma may receive additional credits beyond the 30 for licensure based on evaluation of his or her transcript.

Credit by Examination. The University accepts many of the College Level Examination Program (CLEP) and DANTES Subject Standardized tests as undergraduate transfer credit. Students may earn credit by meeting the minimum required score on selected CLEP or DANTES tests; these credits may be used to fulfill general education, prerequisite requirements or as elective credits; they may not be used to fulfill NURS course requirements. A maximum of 30 credits by examination may be counted toward the degree. Students should consult the BSN Completion Program Office for information on specific CLEP or DANTES exams that are accepted by the University. CLEP tests are administered at local universities. DANTES exams are offered only on military installations.

## ACADEMIC RESOURCES, POLICIES, AND REGULATIONS FOR BSN STUDENTS

BSN students have access to all the academic resources outlined in the section of this Catalog beginning on page 39. The University Academic Policies described in the section beginning on page 53 apply to BSN students.

## NURSING COURSES

## Bachelor of Nursing course offerings (NURS)

310 - The Role of the Professional Nurse (3) Prerequiste: RN Licensure/admission to program. Prerequisite or corequisitie: ENGL 306Q. This course provides the Registered Nurse with a foundation for understanding the expanded role of the professional baccalaureate nurse in the current health care delivery system. Concepts related to professionalism and the fundamental professional values of alturism, autonomy, human dignity, integreity, and social justices will be explored. Thransformation of the individual and of the profession will be examined. Communication behavior to imporve intra- and inter-professional collaboration will be analyzed.

## 320 - Holistic Health Assessment for the Professional Nurse (3)

Prerequiste: RN Licensure; Prerequisite or corequisite: NURS 310. This course is designed to enhance the knowledge of the Registered Nurse by conducting a holistic assessment of health and illness parameters in an individual. The Registered Nurse will assess the following aspects of the individual: behavior, culture, development, environment, family, health literacy, physical, psychological, socioeconomic, and spiritual. The use of alternative/ complementary health modalities by individuals will be explored. The relationship of genetics and genomics to health risks will be examined.

410 - Evidence Based Nursing Research (3) Prerequiste: MATH 200, NURS 310. This course introduces the Registered Nurse to the research process and methods for critiquing research literature. The development of theoretical frameworks for research studies, quantitative and qualitative methodologies to accomplish goals, and the dissemination of research findings will be examined. The use of research in the delivery of evidence-based practice to improve patient outcomes will be explored. The Registered Nurse will further explore a previously identified healthcare issue and engage in a systematic, formal process to identify scientific relationships which can lead to finding solutions to the identified issue or discover new nursing knowledge. Safeguarding patient rights will be explored.

420 - Community and Population Health (3) Prerequisite; MATH 200 and NURS 310.
This course examines population-focused
nursing. Imporving population health through health promotion, disease and injury prevention accross the lifespan for individuals, families, groups, communities and populations will be explored. Fundamentals of epidemiology and biostatistics will be introduced. Primary, secondary and tertiary care will be differentiated. The national health initative Healthy People 2020 will be utilized. The Reigistered Nurse will work in a group to perform an assessment and design a health promotion and/or disease and injury prevention program for an assigned community. This course includes 45 hours of field work experience in the assigned community.

430 - Current Nursing Issues and Trends (3) Prerequiste or corequisite: NURS 310 This course examines the current issues and trends in nursing and their effect on delivering quality and safe patient care. The Registered Nurse will consider current political, economic, and social issues and discuss their impact on health care. The Registered Nurse will examine an issue related to quality, safety, access, equity, affordability, or social justice in healthcare delivery and explore political activism aimed at eliminating health disparities for a vulnerable population. The identified issue will be further explored in NURS 410 EvidencedBased Nursing Research and NURS 490 BSN Practicum.

## 490 - Practicum (3)

Prerequiste: NURS 310, 320, 410, 420, 430. This is a capstone course in which the Registered Nurse will enhance his/her knowlege and skills in leadership, quality improvement, and patient safety. The health care issue identifed in NURS 430, further developed in NURS 410 will be proposed to the practice setting. The Registered Nurse will develop individualized leadership objectives and present an evidencebased practice change to improve quality and/ or patient safety. The course includes a seminar component and a minimum of 45 hours of field work experience with a nurse leader.

## 510 -Informatics and Healthcare Technologies (3)

Prerequiste: MIST 201, NURS 310, 320, 410, 430. This course explores the utilization of information management, patient care technologies and communication technologies to deliver quality and safe patient care. Standardized computer information systems terminologies, regulatory reporting, decision support systems for evidence-based practice
and health education, data analysis for quality improvement, electornic records to improve patient outcomes, data security and confidentiality of patient information will be explored. The Registered Nurse will examine social technology and public information domains and their impact on quality and safe patient care.

## Other UMW Course that must be taken at UMW for the BSN Degree

ENGL 306Q - Writing for Nursing (3) This upper level writing studies course introduces students to the research and theory of writing, with a particular focus on the relationship between writing and healing. Students explore the various benefits of personal writing as well as practice writing for academic and professional audiences.

PHIL 226 - Medical Ethics (3)
An introduction to the philosophical examination of contemporary moral issues. Topics might include the death penalty, euthanasia; hate speech regulation, pornography, and human cloning. (Online)

One course from the following list as offered: ANTH 211 - Anthropology of Race (3) Explores why current vernacular understandings of "race" and scientific understandings of "race" diverge so dramatically. Looks at the long history of scientific (mis)understandings of human biological diversity. Interrogates why racialist thinking has been a fundamental component of a western cultural world view.

ANTH 212 - Anthropology of Gender (3) The anthropological approach to gender: cultural definition and social status of female and male; other genders; theories of gender definition and gender hierarchy.

ANTH 371GG - Medical Anthropology (3) Concentrates on an important anthropological topic not otherwise covered in the curriculum; comprehensive readings and discussion. Choice of topic reflects both student and instructor interests.

PSYC 301 - Social Psychology (3) Individual behavior in a social context; attitudes; social influence; attribution; prejudice and discrimination; prosocial behavior and aggression.

SOCG 304 - Social Stratification (3)
Analysis of class, race, and gender inequality in U.S. society. The nature and consequences of social stratification and power in modern society.

SOCG 315 - Gender and Society (3)
Sociological study of gender differentiation in American society, with an emphasis on major social institutions and social change.

SOCG 331 - The Family (3)
Historical changes in American patterns of marriage, divorce, and child rearing; social class, racial, and ethnic variation; and alternative family forms.

SOCG 334 - Medical Sociology (3)
The relationship of disease and health to social structure and culture. Organizational and role analysis of the medical care industry, various allied health professions, and alternative approaches to coping with health and illness.

SOCG 335 - Global Issues in Health and Illness (3)
Analyze problems of health, illness, inequality, and care at the global level. Examine health care systems and health promotion in comparative perspective. Explore how social forces shape individual and group health behaviors and illness experiences in various structural and cultural contexts. Emphasis on health rights as human rights.

SOCG 371U - Death and Society (3)
Major concep or points of view in contemporary sociology with an emphasis on discussion. Topic varies.

SOCG 400 - Sociology of the Body (3)
How are bodies socially constructed? Seminar examines social, particularly feminist, theories of embodiment. Central questions consider how bodies are sexed/gendered, racialized, ethicized, aged, sexualized, classed, sickened/cured, and otherwise modified through social processes.

SOCG 421B - Race and Ethnic Relations (3) Major concepts or points of view in contemporary sociology with an emphasis on discussion. Topic varies.

## COLLEGE OF BUSINESS

Lynne D. Richardson, Dean

Kenneth D. Machande, Associate Dean for Faculty

The College of Business delivers undergraduate and graduate degree programs providing a distinctive blend of opportunities for learning, scholarship, and professional development that meets the needs of a diverse student population.
The College of Business mission embraces its liberal arts tradition and its geographic location to offer programs that prepare students for life as honorable, competent, and globally-aware leaders.

The mission is supported by:
An undergraduate curriculum based upon a traditional liberal arts foundation emphasizing business fundamentals, ethics, critical thinking, and communication while incorporating new technologies and an awareness of the global marketplace;

A graduate curriculum based on ethical decision-making, critical thinking, research design and data analysis, technological proficiency, communication expertise, national and global business perspectives designed to produce creative leaders; and

A faculty with extensive business experience and academic credentials, committed to excellence in teaching, research and scholarship contributing to knowledge in their disciplines, and service to the regional business community.

UMW has a long history of teaching business-related subjects, dating back to 1919 when the Virginia State Board responsible for the four Normal Schools in Virginia, decided that the Fredericksburg campus would specialize in "commercial" subjects. The first business "teacher" graduated in 1924, the same year that commercial courses were offered in the evening to "interested townspeople".

Since the 1920's Business has been an integral part of Mary Washington, evolving as the school did from primarily preparing teachers to preparing future leaders in a wide variety of fields. In the late thirties and early forties, the Commercial Education major gained National recognition, as the first program to require all majors to have real business experience before they could graduate. Currently, undergraduate internships, while not required, continue this legacy.

UMW's business alumni can be found at work in an array of businesses, government agencies, schools and not-for-profit organizations. Some have risen through the ranks to executive positions here and abroad, some are entrepreneurs running very successful enterprises, and some are teachers and professors.

## FACULTY OF THE COLLEGE OF BUSINESS

Faculty<br>Professors<br>Gail D. Brooks<br>R. Leigh Frackelton, Jr. Mukesh Srivastava<br>Associate Professors<br>Wei Chen<br>Lance C. Gentry<br>David L. Henderson, II<br>Daniel J. Hubbard<br>Kenneth D. Machande Louis A. Martinette Woodrow W. Richardson Xiaofeng Zhao

Assistant Professors Kanchan Deosthali Belleh Asảah Fontem Christopher A. Garcia Rachel Graefe-Anderson Michael S. Lapke Kashef A. Majid John S. Marsh T. Nichole Phillips<br>Senior Lecturers<br>G. Robert Greene<br>Kimberley L. Kinsley<br>Smita Jain Oxford

## ADMISSION TO THE COLLEGE OF BUSINESS

Incoming students interested in pursuing a program of study in business will initially be designated as "pre-business." Normally this designation will be held for no more than the first two years. After admission to the College of Business, a student may declare a business major.

To be admitted to the College of Business, students must have earned a cumulative grade point average of 2.0 or better after completing at least 27 college credits. Additionally, applicants will have completed the following courses for the College of Business and have earned an average GPA of 2.5 in these five courses: Accounting 101, 102 ( 6 credits), Economics 201, 202 ( 6 credits) and Statistics ( 3 credits in Mathematics 200 or equivalents). Note: Accounting 110 may substitute for Accounting 101, 102.

In addition to the requirements above, transfer students must have earned a cumulative GPA of 2.0 in 15 semester hours taken at the University of Mary Washington and have completed 9 semester hours of required College of Business coursework with a cumulative GPA of 2.5 to be admitted to the College of Business.

At the end of each semester, students who have met the requirements for admission to the College of Business will automatically be admitted if they hold a pre-business designation.

## ACADEMIC RESOURCES, POLICIES, AND REGULATIONS FOR COLLEGE OF BUSINESS STUDENTS

Students in the College of Business have access to all the academic resources outlined in this Catalog beginning on page 39. All University Academic Policies described in this Catalog (starting on page 53) apply to College of Business students.

## UNDERGRADUATE BUSINESS <br> ADMINISTRATION DEGREE PROGRAM

The College of Business faculty works together closely to support the University's liberal arts mission. Accordingly, the integrated curriculum provides a balanced rigorous foundation in the core areas of Accounting, Management Information Systems, Finance, Management, and Marketing, all in the context of the broad liberal arts environment provided by the University.
The Faculty hold high expectations of the students and themselves with the goal of developing skills in diagnosing, analyzing, developing and implementing solutions to a wide variety of problems in public and private organizations. The College promotes active learning by encouraging students to manage complex, interdisciplinary problems, marshal resources, and take responsibility for implementing effective solutions. Expected student involvement includes research problems, group case analyses, internships and consulting with organizations throughout the region. Students are encouraged to actively involve themselves in professional service, contributions to society, and the life-long pursuit of knowledge through scholarship and research.

In an environment of mutual trust and support, concerned faculty help students learn the elements of managing resources to achieve a purpose while emphasizing the skills of writing, presenting, and speaking; technological proficiency; and critical thinking in a global context. The students' relationship with faculty is facilitated by small class size. The faculty work closely with students to instill the values of intellectual integrity and objectivity; tolerance and respect for individuality and diversity; the intrinsic rewards of ethical behavior and social responsiveness; and appropriate competitive vigor balanced with the value of effective collaboration with others.

The Business Administration program provides students the opportunity to go forward in the broadest range of professional directions and build sound and rewarding careers.

The academic program leading to a Bachelor of Science degree in Business Administration provides a broad, intellectual outlook and analytical skills for students who wish to combine a liberal arts education with academically rigorous course work in administration and decision-making needed for an eventual career in management or in preparation for graduate study. Course work provides an understanding of the variety of approaches to the complexity of managerial decision-making in the contextual framework of a global society.

An "Executive-in-Residence" program offers students the opportunity for wide-ranging discussions and contact with chief executives from important organizations in the private, public, and not-for-profit sectors.

Scholarships available for majors in business administration include the Frances Holsclaw Brown '44 Scholarship, the Coleman Family Farm Scholarship, the Evelyn Harrell Scholarship, the Fred. E. Miller Memorial Scholarship, the Benjamin T. Pitts Scholarship, The Elizabeth Griffith Schmidt ' 35 Scholarship, the Harry Skinker Scholarship, the George and Monecial Helton Taylor, '81 Scholarship in Business, and the Wachovia Scholarship in Business. Many students belong to the campus chapters of the Accounting Society and Phi Beta Lambda. Students who establish outstanding records of academic achievement may be elected to Sigma Beta Delta, the national honor society in business management and administration.

Senior Business Administration majors who have a strong interest in research and an outstanding academic record may elect to pursue the Departmental Honors program. To be eligible, a student must have a 3.25 grade-point average in upper-division Business Administration courses and a 3.0 overall grade-point average. Honors work consists of expository or original research written in thesis format and defended before a Departmental Honors Committee of faculty. Students pursuing Departmental Honors in Business Administration register for three credits of 491 each semester of the senior year.

## Requirements for the Business Major

Students considering majoring in Business must take BLAW 201, MATH 200 or its
equivalent (CPSC 320, ECON 361, or PSYC 261), and ECON 201 and 202, which are required prerequisites for certain courses in the major.

There are multiple majors offered within the College of Business through the Bachelor of Science degree in Business Administration. All business majors are multi-disciplinary degrees. Requiring that students master concepts from business disciplines such as Accounting, Business Administration, Decision Sciences, Finance, Management, and Management and Information Systems Technology, and Marketing. All majors share a common core of 30 hours of business classes. This common core consists of:

## Lower-Division Requirements:

ACCT 101 102; (ACCT 110 may be taken in place of the ACCT 101 and 102 sequence) DSCI 259; MIST 201.

## Upper-Division Requirements:

BUAD 350; DISC 353; FINC 301; MGMT 301, 490; MKTG 301.

Students must then complete an additional eighteen (18) hours of classes to earn a Bachelor of Science degree in Business Administration. Students may major in Business Administration, Accounting, or Marketing. Upon completion of the program, student transcripts shall state their degree (Bachelor of Science in Business Administration) and their major. The following majors and their post-business core requirements are available.

## Business Administration Major (18 hours)

18 hours of upper-level electives within the College of Business. Note: A maximum of three (3) credits of 499 courses may count toward the upper level elective requirement.

## Accounting Major (18 hours)

Required: ACCT 301, 302, 304, 310 and 460. Students must also complete one of the following four options: ACCT 320, 401, 420 or 430.

Marketing Major (18 hours)
MKTG 411, 450, 490 plus and additional 9 credits selected from any additional upper-level MKTG courses and GISC 200, GEOG 250 or EESC/GEOL 205. Note: A maximum of three
(3) credits of 499 courses may count toward the upper level elective requirement.

## Experiential Learning

The Business Research Experience course provides students with another option (besides the internship option) for fulfilling the general education experiential learning requirement. The Business Research Experience course is designed to be taken simultaneously with DSCI 259: Applied Statistics and Business Research. The Business Research Experience requires students to undertake a rigorous business research project on behalf of a corporate or non-profit sponsoring organization. Students must submit a proposal by the fourth week of their DSCI 259 class that 1) specifies a corporate or non-profit research sponsor, and 2) outlines a clear problem statement and research plan. If the proposed project is granted approval the student must sign an experiential learning contract that obligates them to complete the stated research. Students who complete the project and achieve the objectives stated in the approved proposal will be deemed to have fulfilled the general education experiential learning requirement. Please contact the Associate Dean for Faculty for further details.

## Business Administration Minor

The Business Administration minor provides the conceptual foundations necessary to analyze current issues in business. Essential courses in accounting, MIS, management and marketing combine theory and practice to build a strong knowledge base of core business processes. Advanced business topics allow students to develop knowledge in a specific area. The Business Administration minor complements many majors and provides an opportunity for students to examine and evaluate the complex components of today's competitive business environment.

## Requirements for the Business Administration Minor

Eighteen (18) credits are required. ACCT 101, BUAD 105, MGMT 301, MIST 201, MKTG 301, and one additional upper-level (300 or 400) ACCT, BUAD, BLAW, DSCI, FINC, MGMT, MIST or MKTG course excluding BUAD, 350, 499; DISC 353; FINC 301; MKTG 499 and MGMT 490.

## Accounting Course Offerings (ACCT)

101- Principles of Accounting I (3)
This is the first of two-courses that introduces fundamental accounting techniques and procedures for gathering and reporting financial information used by management and others to plan, evaluate, and control and to insure appropriate use and accountability for its resources. Previously taught as BUAD 131.

## 102 - Principles of Accounting II (3)

Prerequisite: ACCT 101 or equivalent. This is the second of two-courses that introduces fundamental accounting techniques and procedures for gathering and reporting financial information used by management and others to plan, evaluate, and control and to insure appropriate use and accountability for its resources. Previously taught as BUAD 132.

110 - Intensive Principles of Accounting (6) Introduction of fundamental accounting techniques and procedures for gathering and reporting financial information used by management and others to plan, evaluate, and control, and to insure appropriate use of and accountability for tis resources. The course is a substitute for ACCT 101 and 102. Students who have taken ACCT 101 and 102 are not eligible to take this course. Previously taught as BUAD 135.

## 301 - Intermediate Accounting I (3)

Prerequisite: ACCT 201 or equivalent. This course is a review of basic accounting concepts followed by an examination of the accounting process emphasizing financial statement presentation and theory. Current assets and liabilities are studied in depth, drawing heavily on Financial Accounting Standards along with SEC rules and concept releases.

## 302 - Intermediate Accounting II (3)

Prerequisite: ACCT 301 or equivalent. This course continues the examination of accounting processes with an emphasis on noncurrent assets and liabilities, including pensions and other employee compensation issues, leases, and debt financing. This study focuses on Financial Accounting Standards along with SEC rules and concept releases.

304 - Cost/Managerial Accounting (3) Prerequisite: ACCT 102, 110 or equivalent. The material in this course concentrates on the principles and procedures for planning and controlling routine and non-routine decisions, setting policy, and performing long-range
planning. The course focuses on cost behavior, standard costing, flexible budgeting, cost allocation, performance measurement, and analysis for decision-making. Previously taught as BUAD 333.

310 - Federal Taxation of Individuals (3)
Prerequisites: ACCT 102, 110 or equivalent; and business administration major or permission of the Associate Dean for Faculty. Federal income taxation of individuals is studied in reference to gross income, deductions and credits, sales, other disposition of property, changes in the law, and economic impact of the law. Previously taught as BUAD 334.

## 320 - Federal Taxation of Business (3)

 Prerequisite: ACCT 310 or equivalent; and business administration major, permission of the Associate Dean for Faculty. This course develops knowledge about federal income tax for partnerships, corporations, and owners' fiduciary responsibilities in reporting income. Course previously taught as BUAD 335.335 - Federal Taxation of Business (3) Prerequisites: ACCT 310 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course develops knowledge about federal income tax for partnerships, corporations, and owners' fiduciary responsibilities in reporting income. Course previously taught as BUAD 335.
401-Accounting Information Systems (3) Prerequisites: ACCT 102 or 110 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course covers how information technology is used to effectively manage and control the financial transactions associated with electronic commerce in a global, internet-based economy. Systems selection/development and implementation is analyzed as are the business processes that are integral to the value chain. Specific transaction cycles are discussed with an internal controls focus. Previously taught as BUAD 437.

## 420 - Governmental and Not-for-Profit

Accounting (3)
Prerequisites: ACCT 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course covers governmental accounting, including the reporting requirements and interactions between government-wide financial statements and financial statements for governmental,
propriety and fiduciary funds. Budgeting, costing of services, long-term liabilities, debt services, auditing, and evaluation of governmental and not-for-profit entities, including federal and state governments, municipalities, and entities such as schools and hospitals, are examined. Previously taught as BUAD 431.

430 - Advanced Accounting Problems (3) Prerequisites: ACCT 302 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course addresses problems in financial accounting and practice theory dealing with partnerships, corporations, consolidated statements, and fiduciary accounting. Previously taught as BUAD 432.

460 - Auditing (3)
Prerequisite: ACCT 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course examines audit concepts, theory, standards, and procedures, as well as ethical and legal requirements within the context of audit evidence, documentation, and testing required before internal and external auditors issue their reports. Previously taught as BUAD 435.

## 471 - Seminars in Accounting (1-3)

Prerequisite: Permission of instructor, permission of the Associate Dean for Faculty. Special topics of interest to faculty and students are discussed in individual seminars which focus on accounting.

## 491 - Individual Study in Accounting (1-3)

Prerequisite: Junior or senior status, permission of instructor, permission of the Associate Dean for Faculty. Directed by an accounting faculty member, students conduct individual research focusing on an approved topic of interest in accounting.

## Business Administration Course Offerings (BUAD)

105 - Perspectives on Organizations in Society (3)
The evolution of economic systems from political, sociological, and cultural perspectives are examined in order to understand the interactive nature of business, governmental, and societal systems. This course introduces the conceptual foundations necessary to make informed, well-reasoned analyses of the current issues involving an array of organizations from
the private, public, and not-for-profit sectors of the economy.

## 350 - Business Communication (3)

Prerequisites: DSCI 152, 259; and business administration major or permission of the Associate Dean for Faculty. In this course students study Business Communication as a strategic process. The emphasis of the course is on the practical application of written and oral principles of business communication, including audience management, information control, and mastery of language. Additional areas of study include discourse analysis, oral and multimedia presentation techniques and critiques, intra- and inter-cultural differences in communication, impromptu speaking, and structured and planned briefings.

## 356 - Principles of Knowledge Management

 Systems (3)Prerequisites: DSCI 152; and business administration major or permission of the Associate Dean for Faculty. The design and implementation of knowledge management systems that support a variety of business areas are emphasized. Management challenges associated with collecting, organizing and sharing knowledge are discussed in detail.

411 -Financial Modeling (3)
Prerequisite: FINC 301. This course introduces students to technology supporting financial modeling and decision making. Students will learn to apply and extend the concepts they have learned in the introductory finance course into a spreadsheet model framework of Microsoft Excel. The course will examine modeling in four primary areas: (1) corporate finance models, (2) fixed income securities models, (3) portfolio models, and (4) option price models.

## 412 -Advanced Corporate Finance (3)

 Prerequisite: FINC 301. This course develops the processes of making optimal strategic decision by applying corporate financial theory to cases of financial policy, financial instruments and valuation. The course will focus on six broad topics including cost of capital and capital budgeting, discount cash flow valuation and financial multiples, payout policy, equity and debt financing, corporate control and recapitalizations,and corporate governance.426 - Communication and Technology (3) Prerequisite: Business administration major or permission of the Associate Dean for Faculty. Speaking Intensive and Writing Intensive. This
course emphasizes the growing role of digital communication within the business sector. Students will analyze, design, implement and test a website or interactive media project. In so doing, students will be introduced to broader communication concepts such as written and visual rhetoric, digital design, information architecture, and organizational image.

## 464 - Business Ethics (3)

Prerequisites: Senior status; and business administration major or permission of the Associate Dean for Faculty. A study of ethical conduct in management and the elements involved. The course will use a series of applied case studies (illustrating both positive and negative models) to provide an understanding of how to recognize a moral dilemma, evaluate the implications of proposed actions and develop a response. The student should leave with an understanding of ethics and social responsibility as they relate to management.

471 - Business Administration Seminars (1-3) Prerequisites: Business Administration major, permission of instructor, and permission of the Associate Dean for Faculty. Special topics of interest to staff and students are discussed in individual seminars which focus on specific areas within the various disciplines of Business Administration.

## 473 - Environment of International Business

 Seminar (3)Prerequisites: ECON 201; and business administration major or permission of the Associate Dean for Faculty. The political, cultural, and economic aspects of the international business environment are explored in depth. The goal of this seminar is to develop an understanding of the forces at work in the global conduct of business across national boundaries.

## 491 - Individual Study in Business <br> Administration (variable credit, 1-3)

Prerequisites: Junior or senior status, requires permission of instructor and permission of the Associate Dean for Faculty. Directed by a department faculty member, students conduct individual research focusing on an approved topic of interest in business administration. This course does not satisfy the upper-level elective requirement for the major.

499 - Internship (variable credit, 1-3) Prerequisites: Junior or senior status, business administration major, minor or 15 hours in BUAD courses or equivalent; permission of
instructor; and permission of the Associate Dean for Faculty. A supervised work experience in a sponsoring organization developed in consultation with, and under the supervision of, a department faculty member. This course does not satisfy the upper-level elective requirement for the major. Directed by a department faculty member, students conduct individual research focusing on an approved topic of interest in business administration. This course does not satisfy the upper-level elective requirement for the major.

## Business Law Course Offerings (BLAW)

201 - Legal Environment of Business (3) This course focuses on the legal, political, and ethical framework in which businesses and other types of organizations operate. Topics include: Common law and statutory business crimes and torts, common law contracts, business entities, securities regulation, employer/employee relations, environmental protection, and personal and real property laws, In addition, the legal consequences of the choice of business entity are explored while studying sole proprietorships, partnerships, and corporations. Course previously taught as BUAD 283.

301 - Commercial Law (3)
Prerequisite: BLAW 201 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course provides in-depth study of laws affecting commercial transactions and the rationale underlying rights and obligations of parties to these transactions. The Uniform Code is emphasized, especially the Articles dealing with Sales, Commercial Paper, Bank Deposits, Bulk Transfers, Document of Title, and Secured Transactions. The topics of Antitrust, Consumer Protection, Labor Law, and Insurance matters are explored. Course previously taught as BUAD 384A.

## Decision Sciences Course Offerings (DSCI)

219 - Foundation for Data Science (3) Skills and tools in acquiring, parsing, manipulating, and preparing data for statistical analysis. Course previously taught as BUAD 219.

259 - Applied Statistics and Business Research (3)

Prerequisite: MATH 200 or similar Statistics course. This course introduces students to the scientific method to facilitate their
understanding of what constitutes good and bad research and enable them to design and conduct research studies. In addition, the course provides students with skills necessary to analyze, synthesize and evaluate statistical information in order to make informed and appropriate decisions in the workplace and to prepare students for research courses in graduate school. Course previously taught as BUAD 259.

353 - Decision Analysis (3)
Prerequisite: MIST 201 or equivalent and MATH 200 or similar statistics course. This course introduces a variety of Management Science models for use in analysis of "business" problems. A computer software package provides the computational basics for case analysis of problems in linear programming, inventory, waiting lines, PERT/CPM, and simulation. Course previously taught as BUAD 353.

363 - Operations Management (3)
Prerequisite: DSCI 353 or equivalent; and business administration major or permission of the Associate Dean for Faculty. Operations management is an area of business concerned with the production of goods and services. It involves the study of concepts, theories and techniques relating to the operations functions in both manufacturing and service organizations. Lectures, discussions, and case studies are used to provide a comprehensive 219. Course previously taught as BUAD 363.

## 401 - Foundation and Applications of Data Analytics (3)

Prerequisite: Grade of C or better in CPSC 220 or equivalent. This course develops an overview of the challenges of developing and applying analytics for insight and decision=making. Examples and cases will come from customer relation management, price modeling, social media analytics, location analysis and other business domains. Course previously taught as BUAD 403.

## 402 - Analytics Applications and Development

 (4)Prerequisite: Grade of C or better in CPSC 220 or equivalent. A course in programming and data manipulation techniques for constructing analytics-based applications. Topics include SQL or no-SQL databases, using web service API's to acquire data, introduction to Hadoop and MapReduce, and use of third-party analytic
component API's. Course previously taught as BUAD 400.

## Finance Course Offerings (FINC)

301 - Principles of Finance (3)
Prerequisite: ECON 201, ACCT 102 or ACCT 110 or equivalent, MIST 201 or equivalent, DSCI 259 or equivalent, DSCI 353 or equivalent; and business administration major or permission of the Associate Dean for Faculty. An overview of financial management which provides identification and solution of financial problems. Coverage includes the role of financial management, tools of financial analysis, cost of capital, financial structure, long term assets and financial forecasting. Course previously taught as BUAD 381A.

## Management Course Offerings (MGMT)

301 - Principles of Management (3)
Prerequisite: Junior status or permission of the Associate Dean for the Faculty. An integrative approach to organizational concepts, principles, philosophy, and theory in public, private, and not-for-profit organizations is emphasized. Current decision-making approaches utilizing theories of organizational behavior, general systems and contingency theories are linked to the managerial functions of planning, organizing, leadership, and control.

## 345 -Organizational Behavior (3)

Prerequisite: MGMT 301 or equivalent. This course explores the behavioral aspects of organizations, presenting concepts, theories, research and research techniques that can be applied to enhance understanding of people in organizations. Topics included are personnel selection and placement, job and work environments, worker motivation, job satisfaction, and the organizational and social context of human work. Course previously taught as BUAD 345. Cross-listed as PSYC 385

## 346 - Human Resource Management (3)

 Prerequisite: MGMT 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The philosophy, principles, and policies needed to develop effective personnel management and industrial relations programs in business, government, and not-for-profit organizations are developed and discussed. Course previously taught as BUAD 346. Cross-listed as PSYC 386.347 - Organizational Development \& Change (3)

Prerequisite: Business administration major and MGMT 301 or equivalent; or permission of the Associate Dean for Faculty. This course develops a system-wide application of behavioral science methods, theories, and accumulated knowledge to the change and reinforcement of organizational strategies, structures, and processes for improving organizational effectiveness. Course previously taught as BUAD 347. Cross-listed as PSYC 387.

## 420 - Negotiation (3)

Prerequisite: BUAD 350, senior status; and business administration major or permission of the Associate Dean for Faculty. An exploration of negotiation techniques and strategies, including: understanding opponents, determining needs and identifying objectives, and managing concessions and power dynamics, all with an eye towards maintaining goodwill and building long-term, productive professional relationships. The course will cover individual, group, multi-party, agented, and cross-cultured negotiations, through theoretical study and practical application. Course previously taught as BUAD 420. Cross-listed as MKTG 420.

425 - Leadership Theory and Practice (3) Prerequisite: MIST 201 or equivalent. This course involves study of contemporary leadership theory, with emphasis on practical application of those theories. Characteristics of effective leaders, contemporary leadership models, strategic leadership, ethics, power, politics, influence tactics, teamwork, motivation and coaching skills, creativity and innovation, communication, and conflict resolution, are discussed, Students have the opportunity to explore personal leadership styles, learn how to modify them, how to apply them effectively in their work, and write a personal vision statement. Experiential exercises, cases, and other strategies are applied to enhance learning theory and acquire, enhance, and integrate leadership skills related to leading contemporary work organizations. Course previously taught as BUAD 425.

460 - Management Creativity (3)
Prerequisite: Senior status; business administration major or permission of the Associate Dean for Faculty. This course's objective is to develop understanding of the role of creativity in decision-making and problem solving, and to recognize the role of intuition in
such processes, management is decision making and most non-routine decisions ultimately rely on uncertain or vague information and less-than precise data. This course will help to temper the theoretical education with future managers. This course was previously taught as BUAD 460.

490 - Strategic Management (3) Prerequisite: BLAW 201, BUAD 350 FINC 301, MGMT 301, MKTG 301; and Business Administration major or permission of the Associate Dean for Faculty. A capstone course designed to integrate the student's study of management. Advanced case studies and simulations prove a series of integrating experiences where students assume the role of the chief executive officer in a variety of organizational sectors (private, public, not-for-profit). Students are required to make managerial decisions concerning formulation of policy, strategy and tactics along with ethical considerations in organizations' mulitfaceted relationships with the external environment.

## Marketing Course Offerings (MKTG)

301 - Principles of Marketing (3)
Prerequisite: ECON 201 or 202; and junior status. The place of marketing in the global economy and the policies and practices of marketing institutions are explored. Major topics included are marketing functions, organization, research, merchandising, channels of distribution and transportation. Also, problems concerning ethics and social responsibility in the marketing arena are discussed. Course previously taught as BUAD 310..

## 411 - Marketing Research (3)

Prerequisite: DSCI 259 or equivalent; MKTG 301 or equivalent; and business administration major or permission of the Associate Dean for Faculty. Research in marketing is used as a tool to identify, collect and analyze data relevant to decision-making for businesses. Relevant statistical software is used to analyze client data. Ethical considerations related to research findings are also discussed. Course previously taught as BUAD 413.

420 - Negotiation (3)
Prerequisite: BUAD 350, senior status; and business administration major or permission of the Associate Dean for Faculty. An exploration of negotiation techniques and strategies, including: understanding opponents,
determining needs and identifying objectives, and managing concessions and power dynamics, all with an eye towards maintaining goodwill and building long-term, productive professional relationships. The course will cover individual, group, multi-party, agented, and cross-cultured negotiations, through theoretical study and practical application. Course previously taught as BUAD 420. Crosslisted as MKTG 420.

450 - Consumer Behavior (3)
Prerequisite: MKTG 301 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course examines the contributions of behavioral sciences toward understanding and predicting consumer behavior, especially as it pertains to the decison-making process. It is vital for marketers and managers to understand why different people make different decisions in the same circumstances in order to better serve them. This course looks at the empirical evidence from a variety of sources on why various segments behave as they do. This is a speaking intensive (SI) course.

460 - International Marketing (3) Prerequisite: MKTG 301 or equivalent; and business administration major or permission of Associate Dean for Faculty. The focus of this course is to understand the challenges companies face in conducting the international marketing. Students explore various strategies to successfully manage international marketing efforts, including analysis of world markets, consumer behavior, foreign environments, and the marketing management methods required to meet the demands of the global marketplace. The problems of foreign competition, diminishing U.S. market share, and U.S. foreign market entry strategies. Course previously taught as BUAD 410.

471 - Seminars in Marketing (1-3) Prerequisite: Permission of instructor permission of the Associate Dean for Faculty. Special topics of interest to faculty and students are discussed in individual seminars which focus on marketing.

490 - Marketing Strategy (3)
Prerequisite: Permission of instructor; permission of the Associate Dean for Faculty. Special topics of interest to faculty and students are discussed in individual seminars which focus on marketing.

491 - Individual Study in Marketing (1-3) Prerequisite: Junior or Senior status, permission of instructor, permission of Associate Dean for Faculty. Directed by a marketing faculty member, students conduct individual research focusing on an approved topic of interest in marketing.

## 499 - Marketing Internship (1-3)

Prerequisite: Marketing or Business Administration major; 9 hours of MKTG courses or equivalent; permission of instructor; permission of Associate Dean for Faculty. A supervised work experience in a sponsoring organization developed with, and under the supervision of a marketing faculty member. A maximum of 3 hours of 499 classes in the College of Business may be used toward the upper-level elective requirement for any of the majors in the College of Business.

## Management Information Systems Course Offerings (MIST)

201 - Management Information Systems and Applications (3)
The purpose of this course is to examine the technical, business and management aspects of management information systems through the study of MIS theory and concepts. Emphasis is placed on how and why different types of information systems have become an essential part of organizations. Students gain experience solving real world business problems using different information systems applications throughout the course. Course previously taught as BUAD 152.

## 301 - Principles of Knowledge Management Systems (3)

Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The design and implementation of knowledge management systems that support a variety of business areas are emphasized. Management challenges associated with collecting, organizing and sharing knowledge are discussed in detail. Course previously taught as BUAD 356.

350 - Database Management Systems (3) Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. The importance of relational databases in business environments is emphasized and demonstrated through real-world case students and exercise. Students gain experience in planning, designing,
and developing and implementing business applications databases for different business purposes such as modeling and decision making. Course previously taught as BUAD 354.

## 411 - Information Security (3)

Prerequisite: MIST 201 or equivalent; and business administration major or permission of Associate Dean for Faculty. This course provides an understanding of the concepts involved in securing information, both from a technical and business perspective. Skills required to analyzed and evaluate the security of information from a variety of view points are presented. Current research is used to discuss management issues associated with creating policies and implementing procedures for information security in organizations. Course previously taught as BUAD 441.

450- Systems Analysis and Design (3) Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course examines systems analysis theory and concepts that are used to design and analyze different types of information systems from a technical and business perspective. Systems analysis techniques and design processes used by organizations are presented. The complexity of analyzing and designing information systems to support current and future business. Course previously taught as BUAD 446.

448-Project Management for IT (3)
Prerequisite: MIST 201 or equivalent; and business administration major or permission of the Associate Dean for Faculty. This course covers methods for the analysis, design, and implementation of information technology projects from a project management and information systems perspective. Topics include investigating hardware and software needs, cost estimating, scheduling, and human resource management. Students are required to design feasibility plans based on current research. Principles, methods, tools, and techniques available to assist managers in planning, implementing, and controlling projects are also discussed. Practical projects and the implications for managers are addressed. Course was previously taught BUAD 448. (Credit not granted for both MIST 445 and CIST 461)

## COLLEGE OF EDUCATION

Nina Mikhalevsky, Interin Dean

The College of Education administers the Teacher Education Program at The University of Mary Washington. The two departments in the College are the Department of Curriculum and Instruction and the Department of Foundations, Leadership, and Special Populations.
All teacher education licensure programs are approved by the Virginia Department of Education. Requirements for licensure are established by the Virginia Board of Education and are subject to change.

The University offers Bachelor degrees that lead to licensure in preK-12 levels in Visual Arts, Foreign Language (French, German, Latin, Spanish), Music, and Theatre Arts; at the secondary levels (6-12) in each of the following areas: Biology, Chemistry, Computer Science, English, Earth Science, History and Social Science, Mathematics, and Physics. Add-on endorsements are offered in Journalism, Speech Communication, and Algebra I.

The University offers a Master of Science in Elementary Education, a fiveyear undergraduate-graduate program. Students complete education course work and field experiences at the undergraduate level at the University of Mary Washington; graduate with their class receiving their bachelor's degree with a liberal arts or sciences major; and return for one more year during which they complete graduate education course work, an internship, and a research study.

## MISSION STATEMENT

The College of Education of the University of Mary Washington prepares educators for the 21st century who are knowledgeable, skilled, collaborative, reflective, and sensitive to diverse learner needs. To accomplish this, we:

- Are grounded in a strong liberal arts curriculum.
- Emphasize school-based experiences through which students solidify their understanding of the nature of the learner and effective teaching and motivational practices.
- Build a diverse community of practice involving strong partnerships among students, faculty, local teachers, and administrators.
- Enhance teacher aptitudes for research and critical decision making and ensure knowledge of learning theories and research-based pedagogy.
- Challenge educators to respond to the changing nature of learning in the 21st century through an emphasis on multi-literacies.


# FACULTY OF THE COLLEGE OF EDUCATION 

Faculty<br>Professors<br>Teresa L. Coffman<br>Venitta C. McCall<br>George R. Meadows<br>Marie P. Sheckels<br>Jo Tyler<br>Associate Professors<br>Laurie B. Abeel<br>Courtney M. Clayton<br>Beverly D. Epps<br>Jane L. Huffman<br>H. Nicole Myers<br>Tamie Pratt-Fartro

Assistant Professors
John P. Broome
Antonio R. Causarano
Janine Schank Davis
Roberta A. Gentry
Patricia E. Reynolds
Victoria K. Russell
Jennifer D. Walker

## UNDERGRADUATEGRADUATE PROGRAMS IN EDUCATION

While there is not a major in education, the College of Education offers, as electives toward the bachelor's degree, courses designed to prepare the liberal arts student to meet requirements for licensure as a teacher.

Those students who are pursuing licensure at the elementary (preK-6) level enter the Master of Science in Elementary Education Program, which is a five-year undergraduate-graduate program. Students complete education course work and field experiences at the undergraduate level, graduate with their class receiving their bachelor's degree with a liberal arts or sciences major, and return for one more year during which they complete graduate education course work, an internship, and a research study.

Those students who are pursuing licensure for Special Education: General Curriculum enter the Master of Education Initial Licensure Five Year Pathway: Special Education General Curriculum, which is a five-year undergraduate-graduate program. Students major in biology, chemistry, physics, earth science, history, English, or mathematics, complete education coursework and field experiences at the undergraduate level; graduate with their class receiving their bachelor's degree with a liberal arts or sciences major; and return for one more year during which they complete graduate education
coursework, an internship, and a research study ( 33 total graduate hours).

Those students who are pursuing licensure for Special Education: Adapted Curriculum enter the Master of Education Initial Licensure Five Year Pathway: Special Education Adapted Curriculum, which is a five-year undergraduate-graduate program. Students complete education coursework and field experiences at the undergraduate level, graduate with their class receiving their bachelor's degree with a liberal arts or sciences major, and return for one more year during which they complete graduate education coursework, an internship, and a research study ( 33 total graduate hours).

The College also offers the Master of Education Initial Licensure Five Year Pathway: PreK-12 for students pursuing licensure at the preK-12 level in Visual Arts, Foreign Language (French, German, Latin, Spanish), Music, and Theatre Arts; and the Master of Education Initial Teacher Licensure Five Year Pathway: Secondary for licensure in grades 6-12 in each of the following areas: Biology, Chemistry, Computer Science, English, Earth Science, History and Social Science, Mathematics, and Physics. Add-on endorsements are offered in Journalism, Speech Communication, and Algebra I. These programs are undergraduategraduate pathways to the Master of Education degree. Students complete education course work and field experiences at the undergraduate level, graduate with their class
receiving their bachelor's degree with a liberal arts or sciences major, and return for one more year during which they complete graduate education course work, an internship, and a research study.

Throughout the program, students gain experiences and skills in monitoring their own professional growth through research, reflection, and problem solving. Most of the courses require students to complete field experiences in the public schools.

College of Education students have access to all the Academic Resources outlined in that section of this Catalog. All University Academic Policies described in the Catalog apply to the College of Education students. Students must complete general education requirements, a liberal arts or sciences major, and professional studies (education course work) requirements. The professional studies component provides students with background knowledge and experience in curriculum planning and implementation with a focus on teaching the national and state standards from a constructivist-developmental approach.

All students who gain admission to the program are eligible to join the Student Education Association. Students with high academic achievement are invited to become members of the Nu Xi Chapter of Kappa Delta Pi, an international honor society in education. Awards are given each year to a students who excels in supervised teaching, academic achievement, and leadership. Students in the Teacher Education Program have the opportunity to apply for a variety of scholarships.

## Admission and Requirements

Admission to the Teacher Education Program is by application directly to the College of Education. Admission is competitive and is based on academic achievement in the undergraduate program and on other indications of potential in meeting the program goals. Students interested in seeking credentials to teach should contact the College of Education as early in their college career as possible and must attend a Group Information Session on the Teacher Education Program. Group Information Sessions are offered throughout the academic year. At these sessions, students are informed of the features and requirements of the program.

Students are advised of the required Minimum Performance Standards and are asked to apprise the department of requests for accommodations. UMW students who are interested in the Teacher Education Program should attend one of these Group Information Sessions as soon as possible. Prospective transfer students who are interested in the Teacher Education Program should attend one of these Group Information Sessions.

## Admission, continuation, and exit

requirements are defined within a threestage procedure: (1) Undergraduate Admission, (2) Graduate Admission, and (3) Successful Completion of the Program and Recommendation for Licensure. Detailed descriptions of the program requirements are explained on the College of Education web page.

For Undergraduate Admission and permission to take the first education course, Education (EDUC) 203 or 204, current UMW students must have passed the Praxis Core test or qualifying equivalent assessments, attained a 2.5 GPA or better on at least 12 UMW credits, completed the Child Abuse Recognition and Intervention training, and have attended an Education Group Information Session on the Fredericksburg campus. Applications are due October 1 for admission to EDUC 203 or 204 during the subsequent spring semester, and February 1 for admission to EDUC 203 or 204 during the subsequent fall semester. Transfer students who have a 3.25 GPA may apply to take EDUC 203 or 204 their first semester at UMW. They should submit their application for EDUC 203/204 by May 15 for fall enrollment or December 1 for spring enrollment. Applications can be found on the College of Education web page. Transfer students who do not submit applications by these deadlines or do not meet the above requirements should apply to take these courses once they are enrolled at UMW under the guidelines for current UMW students.

After the students pursuing elementary licensure, secondary, preK-12, or Special Education successfully complete EDUC 203 or 204, they are assigned to a professional studies cohort that is determined by the year that they will complete the graduate course work. Students are required to participate in regular cohort advising.
To continue in the program, students are responsible for following the regulations and application deadlines. To continue in the program students must do the following: (a)
maintain good academic standing with an overall GPA of 2.5 or better; (b) achieve a GPA of 3.0 or better on the required professional education courses; (c) demonstrate satisfactory progress on all Professional Competencies; (d) be current on all Professional Clearances; (e) achieve satisfactory evaluations in all field experiences; and ( f ) participate in regular cohort advising. Students not accepted into the Program should note that there is a 12 -credit limit on education course work that may be applied toward the degree. A student who receives more than one C in an education course will be dismissed from the program.
Students who apply for the fifth or graduate year of the M.S. in Elementary Education program or one of the secondary or preK-12. M. Ed. Initial Licensure Five Year Pathway programs must submit their application for Graduate Admission during the fall semester of their final year of undergraduate study. Applications for graduate admission and internship are due by November 1. For students in the M.S. in Elementary program for specialization requests are due on the same date.

Students who apply for the fifth or graduate year of one of the Special Education, K-12 M.Ed. Initial Licensure Five Year Pathway programs must submit their application for Graduate Admission by November 1 of their final year of undergraduate study.

To receive Graduate Admission to the Program students must do the following: (a) continue to meet the criteria listed for continuation in the program, (b) successfully complete required course work, (c) receive a bachelor's degree from UMW, (d) and must achieve passing scores on Praxis II, the Virginia Communication and Literacy Assessment, and for those students in the Elementary program and Special Education: General Curriculum program, the Reading for Virginia Educators assessment.

For successful completion of the program and recommendation for licensure to the Virginia Department of Education students must do the following: (a) earn a 2.5 minimum overall GPA, and a minimum GPA of 3.0 in the professional studies sequence (undergraduate and graduate); (b) complete of all degree requirements; (c) earn a grade of "B" or better in the Teaching Internship; and (d) achieve passing scores on Praxis II (required for Elementary, Secondary and P12 licensure programs), the Virginia Communication and Literacy Assessment, and
the Reading for Virginia Educators Assessment (elementary and special education only) as required and established by the Virginia State Board of Education.
M.S. in Elementary Education (preK-
6) Undergraduate Professional Studies Requirements:
EDUC 203, MATH 204, EDUC 303, 305, 311, $371,373,386,387,388$, and 420.
M.S. in Elementary Education (preK-
6) Graduate Professional Studies

Requirements:
EDUC 510, 514, 521, 530, 539, 540 and one of the specialization areas $522,523,524,525,526$, 527,528 , or 529.
M.Ed. Initial Licensure Five Year Pathway:
Special Education, General Curriculum,
Undergraduate Professional Studies Requirements:

EDUC 203, 371, 373, appropriate disciplinespecific course from EDUC 453, 455, 456, or 458, plus 351, 420 and EDSE 390.
M.Ed. Initial Licensure Five Year Pathway: Special Education, General Curriculum, Graduate Professional Studies Requirements:

EDCI 500, 589, EDSE 519, 521, 533, 534, 535, and 552, INDT 531.
M.Ed. Initial Licensure Five Year Pathway: Special Education, Adapted Curriculum, Undergraduate Professional Studies Requirements:

EDUC 203 or 204, 371, 420 and EDSE 303 and 390.
M.Ed. Initial Licensure Five Year Pathway: Special Education Adapted Curriculum, Graduate Professional Studies Requirements:

EDCI 500, 589; EDSE 533, 534, 535, 539, 541, and 552; INDT 531.

Secondary (Grades 6-12) Undergraduate Professional Studies Requirements:

EDUC 204, Appropriate discipline-specific course from EDUC $453,455,456$, or 458, plus EDUC 351, 384, 385, and 420.
Secondary (Grades 6-12) Graduate
Professional Studies Requirements:
INDT 501; EDCI 515; EDUC 521, 530, 531, 535, 540 , and 541.

# Visual Arts (preK-12) Undergraduate Professional Studies Requirements: 

EDUC 203 or 204, 311, 351, 384 or 387,385 or 387,420 , and 459.

## Foreign Language (preK-12) Undergraduate Professional Studies Requirements:

EDUC 203 or 204, 351, 384 or 387,385 or 388,420 and 454. In addition, select one of the following: EDUC 311 or 371 .

## Music (preK-12) Undergraduate Professional Studies Requirements:

EDUC 203 or 204, 384 or 387,385 or 388,420 , 457, MUED 170, 491A, and 491B.

## Theater Arts Undergraduate Professional Studies Requirements:

EDUC 203 or 204, 351, 384 or 387,385 or 388, 420 and 453.

## Graduate preK-12 Professional Studies Requirements:

EDCI 515, 580, EDUC 521, 530, 535, 540, 541, and INDT 501.

See the UMW Graduate Catalog for graduate course descriptions.

## Special Education Course Offerings (EDSE)

303 - Understanding Autism (3)
The 3-credit course will teach students about the characteristics of individuals diagnosed with disabilities that fall under the category of Autism Spectrum Disorders (ASDs). This course will include a discussion of the core behavioral and secondary characteristics of autism as well as the known physiological components associated with the ASDs. Students will learn about the prevalence as well as the common theories of etiologies. Dual diagnoses, co-morbidity, educational concerns and medical issues will also be discussed. Additionally, a review of the characteristics across the lifespan, from infancy and toddlerhood through adulthood will be provided. Family concerns and considerations will be discussed in the context of age, development, and need for support. Field based experience required.

## 390 Survey of Special Education: Characteristics and Legal Issues (3) <br> Prerequisite: EDUC 203 or 204. This course presents an overview of the historical basis and regulatory requirements related to special

education, including the individual education program (IEP) as a legal document and the rights and responsibilities of parents, teachers, and schools. The characteristics of learners with disabilities and their educational and medical implications are also examined, as well as the cultural, familial, and ethical issues involved. Field experience is required.

## Education Course Offerings (EDUC)

203 - Introduction to Learning and Teaching: Elementary (3)

## 204 - Introduction to Learning and Teaching:

 Secondary and preK-12 (3)Prerequisite: Admission is by application to the Education program. Students must have attained a 2.5 GPA or better on at least 12 UMW credits and have attended a Group Information Session. Transfer students may apply to enroll in this course during their first semester at UMW. Education 203/204 will provide beginning students with an introduction to learning and teaching in public schools. The primary goal for this course is "learning how to learn to teach" which will be accomplished through field experience, cooperative learning activities, class discussion, and lecture. Education 203/204 is a survey course - each of the major topics (classroom management, student motivation, curriculum, instruction, and professionalism) introduced in this course will be examined more thoroughly in both content and field experience in subsequent course work and practica. Field experience required.

## 272 - Special Topics in Education (1-3)

 Topics in Education chosen according to timely interests and designed for students not necessarily in the education program. Topics vary. May be repeated with different topics.303 - Scientific Inquiry (3)
Prerequisite: EDUC 203. Planning and instructional skills for teaching science in the elementary classroom. Provides students training and practice in using an assortment of developmentally appropriate teaching methods for elementary level science. Also provides students with an understanding of the current Virginia Standards of Learning for Elementary Science and how instruction may be designed to meet the requirements of those Standards. Field experience required.

305 - Mathematical Concepts and Methods II (2) Prerequisites: EDUC 203 and MATH 204. Mathematical concepts and methods of
teaching for the elementary school. Topics include geometry, measurement, probability and statistics. Field experience required.

## 311 - Literature and the Arts in the Elementary Classroom (3)

Prerequisite: EDUC 203. Educational approaches that encourage children's expressive development through the integration of literature, the arts, and media throughout the elementary curriculum. Students will read a variety of genres of children's literature and learn basic information about dance, drama, visual arts, and music, as well as strategies for teaching science, math, social studies, reading and language using children's literature and these art forms. Field experience required.

351 - Instructional Design and Assessment (4) Prerequisite: EDUC 203 or 204. Relates the theories of development, constructivism and learning, and brain research to planning and instruction in the secondary classroom. Reading and writing in the content areas is stressed. Field experience required.

## 371 - Language Development and Literacy Instruction: Primary (3)

Prerequisite: EDUC 203. Study of language development and learner-sensitive approaches to early childhood literacy instruction for emerging readers. Focus is on teaching and assessment strategies for literacy instruction in the primary grades ( $\mathrm{K}-3$ ). Field experience required.

## 373 - Language Development and Literacy

 Instruction: Intermediate (3)Prerequisites: EDUC 203 and 371. Course emphasizes how to effectively utilize literacy workstations, guided reading, word study, spelling instruction and vocabulary exploration to optimize children's learning and development across the curriculum, and addresses the language and literacy needs of students who do not speak English as their first language. Field experience required.

## 384 - Introduction to Special Education:

 Secondary (3)Prerequisite: EDUC 203 or 204. The characteristics of learners with disabilities in secondary classrooms and their educational implications are examined, as well as the cultural, familial, and ethical issues involved. The course also presents an overview of the regulatory and legal requirements related to special education, including the individual education program (IEP) as a legal document
and the rights and responsibilities of parents, teachers, and schools.

385 - Managing the Secondary Classroom (2) Prerequisite: EDUC 203 or 204. Teacher candidates will learn a variety of approaches to secondary classroom management. Emphasis is on establishing a classroom community, working with challenging adolescents, and communicating with parents. Field experience required.

## 386 - Elementary Social Studies Methods (3)

 Prerequisite: EDUC 203. Teacher candidates will learn the major orientations to the social studies and their corresponding methods. Emphasis is on researching, writing, and implementing lessons that teach for understanding and inspire critical thinking.
## 387 - Introduction to Special Education: Elementary (2)

Prerequisite: EDUC 203 or 204. The characteristics of learners with disabilities in elementary classrooms and their educational implications are examined, as well as the cultural, familial, and ethical issues involved. The course also presents an overview of the regulatory and legal requirements related to special education.

## 388 - Managing the Elementary Classroom (2)

Prerequisite: EDUC 203 or 204. Teacher candidates will learn a variety of approaches to elementary classroom management. Emphasis is on establishing a classroom community, working with challenging children, and communicating with parents. Field experience required.

## 420 - The Professional Teacher and Critical Issues in Education (3)

Prerequisites: EDUC 203 or 204, and at least two additional education courses. Prospective teachers become independent, reflective decision makers by critically examining the philosophical, ethical, historical, legal, and social contexts of the American school.

439 - Classroom Teaching and Research (3) Prerequisite: EDUC 420 and all course work required for the endorsement pathway. Student teachers reflect on the lessons and programs they design by applying problem-solving and decision-making techniques to the task of elementary school teaching. Taken concurrently with EDUC 440.

440 - Supervised Teaching (9)
Prerequisites: EDUC 420 and all coursework required for the endorsement pathway. Orientation to teaching under the direction of cooperating teachers in the public schools.

## 453 - The Teaching of English and Theater Arts

 (3)Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 553.

454 - The Teaching of Foreign Language (3) Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 554.

455 - The Teaching of History and Social Sciences (3)
Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Cross-listed as EDCI 555.

456 - The Teaching of Mathematics and Computer Science (3)
Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 556.

457 - The Teaching of Music (3) Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies,
and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 557.

458 - The Teaching of Sciences (3)
Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 558.

## 459 - The Teaching of Visual Arts (3)

Prerequisite: EDUC 351. This course prepares teacher candidates for planning instruction, selecting materials, developing and implementing instructional strategies, and designing assessments in their licensure area. Students become familiar with state and national standards and professional organizations. Field experience required. Crosslisted as EDCI 559.

## 472 - Special Topics in Education (1-6)

 Prerequisite: Permission of the department. Specific subject content to be determined by interest of faculty and students. A maximum of six credits may count in a teacher licensure program.
## 499 - Internship (credits variable)

Supervised off-campus experience developed in consultation with the department. May not be used to satisfy required professional education course work. A maximum of three credits may count in the teacher licensure program.

## DIRECTORY

THE CORPORATIONThe Rector and Visitors of the University of Mary Washington
THE 2014-2015 OFFICERS OF THE VISITORS
Mrs. Holly T. Cuellar Rector
Mr. Joseph W. Grzeika ..... Vice Rector
Mr. Mark S. Ingrao '81 Secretary
THE VISITORS OF THE UNIVERSITY, 2014-2015
Ms. Tara C. Corrigall ' 82 Virginia Beach, Virginia
Dr. Theresa Y. Crawley '77 Fredericksburg, Virginia
Mrs. Holly T. Cuellar '89 Ardmore, Oklahoma
Mr. Carlos Del Toro Alexandria, Virginia
Hon. Joseph W. Grzeika '83 King George, Virginia
Hon. Dorcas R. Hardy Spotsylvania, Virginia
Mr. B. Judson Honaker

$\qquad$ Fredericksburg, Virginia
Hon. R. Edward Houck Spotsylvania, Virginia
Mr. Mark S. Ingrao '81 Falls Church, Virginia
Mr. Kenneth J. Lopez '92 Alexandria, Virginia
Mr. Fred M. Rankin, III Fredericksburg, VirginiaMs. Lisa D. Taylor '85.Baltimore, Maryland
Dr. Martin A. Wilder, Jr.

## ADMINISTRATION

## PRESIDENT

Richard V. Hurley President
B.S., Richard Stockton College; M.A., Central Michigan University

Martin A. Wilder, Jr. ..............................................................................Chief of Staff
B.A., M.Ed., Ed.D., University of Virginia

Leah K. Cox.....................................Special Assistant to the President for Diversity and Inclusion and Omsbudperson
B.A. Western Maryland College;
M.S., University of Arizona;

Ph.D., University of Maryland

## ACADEMIC AFFAIRS

Jonathan Levin
Provost
A.B., University of Michigan;
M.A., University of California at Los Angeles; Ph.D., Rutgers University
John T. Morello Associate Provost for Academic Affairs
A.B., The College of William and Mary; M.A., Northern Illinois University;

Ph.D., Wayne State University

> Kimberly Buster-Williams.............Associate Provost for Enrollment Management B.A., MSED, Ed.S., Old Dominion University

Timothy M. O'Donnell
.Associate Provost for Academic Engagement and
Student Success
B.A., M.A., Wake Forest University; Ph.D., University of Pittsburgh
Taiwo Ande ............. Assistant Provost for Institutional Analysis and Effectiveness B.S., M.S., University of Ibadan (Nigeria);

MBA and MISM, DeVry University; Ph.D., Indiana State University.
Jeffrey W. McClurken ................... Special Assistant to the Provost for Technology, Teaching, and Innovation
B.A. Mary Washington College;
M.A., Ph.D., The Johns Hopkins University

Rosemary Arneson .......................................................................University Librarian
B.A. University of Georgia;
M.Ln., Emory University

Rita F. Dunston University Registrar B.S., Norfolk State University; M.S., Old Dominion University P. Anand Rao ............. Speaking Center and Speaking Intensive Program Director B.A., M.A., Ph.D., University of Pittsburgh

Gwen N. Hale ................................. Writing Center and Writing Program Director B.A., M.A., East Tennessee State University; Ph.D., Middle Tennessee State University
James Groom ............... Director, Division of Teaching and Learning Technologies B.A., University of California at Los Angeles

Mary A. Kayler .............. Director, Center for Teaching Excellence and Innovation B.S., State University of New York at Oswego; M.S., PhD., Syracuse University

Kelly Graham $\qquad$ Director, Academic and Career Services B.A., University of New Hampshire; M.S., College of New Rochelle

Sandra C. Fritton.....................................................Director, Disability Resources BFA, M.A., Ph.D, Virginia Commonwealth University

Jose A. Sainz Director, Center for International Education B.A., Universidad de Deusto (Spain); M.A., West Virginia University; Ph.D., University of Maryland
Mark J. Safferstone ............... Executive Director, UMW Campuses Stafford and Dahlgren
B.Ed., M.Ed., University of Miami; MBA, University of Mary Washington; Ph.D., Vanderbilt University
Brian J. Baker ..................Executive Director, Center for Economic Development B.A., MBA, University of Mary Washington

## COLLEGE OF ARTS AND SCIENCES

Richard Finkelstein
Dean of the College of Arts and Sciences
B.A., Williams College;
M.A., Ph.D., University of Chicago

Grant R. Woodwell. $\qquad$ Associate Dean, College of Arts and Sciences B.A., Columbia University; M.Phil., Ph.D., Yale University
B.A., Mary Washington College;

$$
\begin{aligned}
& \text { M.A., University of North Carolina at Chapel Hill; } \\
& \text { Ph.D., University of Virginia }
\end{aligned}
$$

Pamela S. McCullough .............Director, Bachelor of Science in Nursing Program BSN, MSN, , The Catholic University of America;<br>DPN, Old Dominion University

Kevin P. Bartram Director of the Orchestra
B.M., Northwestern University; M.M., University of Missouri at Columbia; Ph.D., Shenandoah Conservatory
David S. Berreth $\qquad$ Director of Belmont B.A., Bowdoin College; M.A., Syracuse University

Scott A. Harris ............Director, James Monroe Museum and Memorial Library B.A., Mary Washington College; M.A., The College of William and Mary

## COLLEGE OF BUSINESS

Lynne D. Richardson...............................................Dean of the College of Business
BBA, University of Montevallo;
MBA, University of Alabama at Birmingham;
Ph.D., University of Alabama
Kenneth D. Machande............................................Associate Dean for Faculty
A.A., University of Maryland;
BLS, Mary Washington College;
MBA, Albany State University

COLLEGE OF EDUCATION
Nina Mikhalevsky
Interim Dean of the College of Education
B.A., Boston University;
M.A., Ph.D., Georgetown University

Shalyn M. Lapke.........Associate Dean of Clinical Experiences and Partnerships
B.S., Florida State University;
M.Ed., University of North Florida;

Ph.D., Virginia Commonwealth University

Constance A. Gallahan.... Director of Academic Advising, College of Education B.S., Longwood College;
M.S., University of Tennessee

## ADMINISTRATION AND FINANCE

Richard R. Pearce
Vice President, Administration and Finance B.S., Virginia Polytechnic Institute \& State University; MBA, Radford University
Sabrina C. Johnson.............. Associate Vice President for Human Resources and Affirmative Action and Equal Employment Opportunity Officer B.S., MPA, Virginia Commonwealth University; J.D., The College of William and Mary

Alllyson P. Moerman, CPA, CITP, CGFM. $\qquad$ Associate Vice President for Finance and Controller B.S., George Mason University

John P. Wiltenmuth III ............... Associate Vice President for Facilities Services BSME, U.S. Naval Academy; MPA, Virginia Polytechnic Institute \& State University
Erma A. Baker $\qquad$ Assistant Vice President for Business Services B.A., Mary Washington College

Paul C. Messplay....Executive Director, Office of Budget and Financial Analysis B.A., MPA, Virginia Commonwealth University

Hall Cheshire $\qquad$ Acting Chief Information Officer B.S., The American University

## STUDENT AFFAIRS

Juliette Landphair $\qquad$ Vice President for Student Affairs
B.A., Tulane University
M.A., Ph.D., University of Virginia;

Cedric B. Rucker $\qquad$ Associate Vice President for Student Affairs and Dean of Student Life
B.A., Mary Washington College; M.A., University of Virginia

Melissa Jones $\qquad$ Assistant Dean for Student Involvement B.A., University of Virginia;
M.Ed., University of Virginia;
M.Ed., James Madison University
Marion Sanford ......................................Director of Multicultural Student Affairs
B.A., Jackson State University;
M.A., Ph.D., Iowa State University
Christine Porter.......................................Director of Residence Life and Housing
B.A., University of Tampa;
M.A., Bowling Green State University
Mark Mermelstein .............................................. Director of Campus Recreation
B.S., The Pennsylvania State University;
M.A., University of the Pacific

## ADVANCEMENT AND UNIVERSITY RELATIONS

Salvatore M. Meringolo $\qquad$ Vice President for Advancement and University Relations B.A., State University of New York at New Paltz; MLS, State University of New York at Albany; MBA, Iona College
Ken L. Steen $\qquad$ Associate Vice President of University Advancement and Alumni B.A., Wofford College Anna B. Billingsley...................Associate Vice President for University Relations B.A., The College of William and Mary; M.A., American University
Jan G. Clarke .......................................... Assistant Vice President of Gift Planning B.S., Averett College
Nina C. Thompson.......................................................Associate Vice President of Advancement Relations \& Operations
B.A., Blackburn College;
M.A., University of Missouri

## FACULTY

Laurie B. Abeel, Associate Professor of Education $(2003,2006)$
B.S., The Pennsylvania State University; M.Ed., Ph.D., University of Virginia

Maysoon Fayez Al-Sayed Ahmad, Lecturer in Arabic $(2010,2014)$
B.A., M.A., University of Jordan

Nabil S. Al-Tikriti, Associate Professor of History $(2004,2010)$
B.S., Georgetown University; MIA, Columbia University; M.A., Ph.D., The University of Chicago

David K. Ambuel, Leidecker Chair and Professor of Philosophy $(1992,2007)$
B.A., Northwestern University; M.A., University of Munich; Ph.D., Northwestern University

Mehdi Aminrazavi, Leidecker Chair and Professor of Philosophy and Religion (1992, 2005)
B.A., M.A., University of Washington; Ph.D., Temple University

Karen M. Anewalt, Professor of Computer Science $(2000,2012)$
B.S., Allegheny College; M.S., Ph.D., The College of William and Mary

Deena A. Applebury, Senior Lecturer in Athletics, Health, and Physical Education (2003, 2008)
A.A., State Fair Community College; B.S., M.S., University of Missouri at St. Louis

Janet A. Asper, Associate Professor of Chemistry $(2005,2011)$
B.S., Ohio University; Ph.D., University of Pittsburgh

Dianne M. Baker, Associate Professor of Biology $(2006,2012)$
B.S., The Evergreen State College; M.S., Ph.D., University of Washington

Robert R. Barr, Associate Professor of Political Science $(2005,2009)$
B.A., M.A., University of Virginia; Ph.D., University of Texas at Austin

Rosemary Barra, William M. Anderson, Jr. Distinguished Chair of Biological Sciences and Professor of Biology $(1983,1995)$
B.S., Duquesne University; Ph.D., Rutgers University

Antonio Barrenechea, Associate Professor of English $(2005,2011)$
B.A., Fordham University; M.Phil., Ph.D., Yale University

Michael L. Bass, Professor of Biology and Environmental Science $(1968,1983)$
A.A., Clinch Valley College; B.S., Virginia Polytechnic Institute \& State University; M.S., Medical College of Virginia; Ph.D., Virginia Polytechnic Institute \& State University

Porter R. Blakemore, Associate Professor of History $(1979,1987)$
B.A., University of North Carolina at Chapel Hill; M.A., Madison College; Ph.D., University of Georgia

[^7]María Laura Bocaz-Leiva, Assistant Professor of Spanish $(2010,2010)$
Licenciatura, Pontificia Universidad Catôlica de Chile; M.A., Ph.D., University of Iowa
Eric C. Bonds, Assistant Professor of Sociology $(2011,2011)$
B.S., University of Wyoming; M.A., Minnesota State University at Mankato

Dawn S. Bowen, Professor of Geography $(1996,2011)$
B.A., Mary Washington College; M.A., University of Maine at Orono; Ph.D., Queen's University

Abby G. Brethauer, Lecturer in Athletics, Health, and Physical Education (2010, 2010)
B.A., Kenyon College; M.A., Columbia University Teacher's College

Cate M. Brewer, Lecturer in Theatre $(2009,2013)$
B.A., Washington University in St. Louis; MFA, Virginia Commonwealth University

Gail D. Brooks, Professor of Management Information Systems (1990, 2008)
B.S., M.S., Virginia Polytechnic Institute \& State University; Ph.D., George Mason University

John P. Broome, Assistant Professor of Education $(2008,2011)$
B.A., The College of William and Mary; M.Ed., George Mason University; Ph.D., University of Virginia

Patrick L. Catullo, Senior Lecturer in Athletics, Health, and Physical Education (2004, 2004)
B.S., Mary Washington College; MSS, The United States Sports Academy

Antonio R. Causarano, Assistant Professor of Education $(2014,2014)$
M.A., University of Findlay (Ohio); M.A., Ph.D., University of New Mexico

Wei Chen, Associate Professor of Management $(2009,2015)$
B.A., Xiamen University, China; M.S., Ph.D., Texas Tech University

Yuan-Jen Chiang, Professor of Mathematics $(1989,2003)$
B.S., National Taiwan Normal University; M.A., Ph.D., The Johns Hopkins

University
Ana G. Chichester, Professor of Spanish $(1984,2010)$
B.A., Mary Washington College; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Virginia

Tracy B. Citeroni, Associate Professor of Sociology (1998, 2005)
B.A., St. Vincent College; M.A., University of Pittsburgh; Ph.D., University of Texas at Austin

Courtney M. Clayton, Associate Professor of Education $(2009,2015)$
B.A., University of Pennsylvania; M.A., University of San Francisco; Ph.D., Boston College

Teresa L. Coffman, Professor of Education $(2004,2014)$
B.A., Hood College; M.A., San Francisco State University; Ph.D., Capella University

Manning G. Collier, Associate Professor of Mathematics $(1982,1988)$
B.S., Furman University; M.S., Ph.D., Vanderbilt University

Deborah A. Conway, Associate Professor of Athletics, Health, and Physical Education (1987, 1997)
A.A., Ferrum College; B.A., M.Ed., Lynchburg College

Rosalyn L. Cooperman, Associate Professor of Political Science $(2003,2009)$
B.A., Indiana University; Ph.D., Vanderbilt University

Timothy A. Crippen, Professor of Sociology $(1982,1994)$
A.B., Indiana University; M.A., Ph.D., University of Texas at Austin

Katherine Nicole Crowder, Associate Professor of Chemistry $(2008,2014)$
B.S., Sweet Briar College; M.A., Ph.D., Princeton University

Jean A. Dabb, Professor of Art $(1992,2009)$
B.A., Weber State College; M.A., University of Massachusetts at Amherst; Ph.D., University of Michigan at Ann Arbor

Shumona Dasgupta, Assistant Professor of English $(2013,2013)$
B.A., M.A., University of Delhi; Ph.D., State University of New York at Stony Brook

Jason W. Davidson, Professor of Political Science $(2001,2014)$
B.A., University of California at Berkeley; M.A., Ph.D., Georgetown University

Stephen C. Davies, Associate Professor of Computer Science $(2006,2012)$
B.S., Rice University; M.S., Ph.D., University of Colorado at Boulder

Janine Schank Davis, Assistant Professor of Education $(2012,2012)$
B.A., Virginia Polytechnic Institute \& State University; M.Ed., Boston College;

Ph.D., University of Virginia
Antonia L. Delgado-Poust, Assistant Professor of Spanish $(2011,2014)$
B.A., Bucknell University; M.A., Ph.D., Pennsylvania State University

Melody B. Denhere, Assistant Professor of Mathematics $(2013,2013)$
B.Sc., M.Sc., University of Zimbabwe; (Ph.D.), Auburn University

Kanchan Deosthali, Assistant Professor of Management $(2013,2013)$
B.E., University of Mumbai, India; M.S., University of Louisiana at Lafayette; Ph.D., State University of New York, University at Albany
Joseph C. Di Bella, Distinguished Professor of $\operatorname{Art}(1977,1999)$
B.A., Rutgers College; M.A., MFA, Northern Illinois University

Brooke E. Di Lauro, Associate Professor of French $(2006,2012)$
B.A., University of Pennsylvania; M.A., M.Phil., Ph.D., Yale University

Andrew S. Dolby, Professor of Biology $(2000,2012)$
B.A., Appalachian State University; M.S., Colorado State University; Ph.D., The Ohio State University
Joseph G. Dreiss, Professor of $\operatorname{Art}(1976,1991)$
B.A., Fairleigh Dickenson University; M.A., Rutgers University; Ph.D., State

University of New York at Binghamton
Lindsey M. Elliot, Lecturer in Athletics, Health, and Physical Education $(2011,2011)$
B.S., M.Ed., Salisbury University

Beverly D. Epps, Associate Professor of Education $(2005,2005)$
B.S., M.Ed., Ph.D., University of Virginia

Mindy J. Erchull, Associate Professor of Psychology $(2005,2011)$
B.A., Connecticut College; M.A., Ph.D., Arizona State University

Julius N. Esunge, Associate Professor of Mathematics $(2009,2015)$
B.Sc., University of Buea, Cameroon; M.S., Lehigh University; M.S.,

Ph.D., Louisiana State University
Marcelo Fajardo-Cárdenas, Assistant Professor of Spanish $(2010,2010)$
B.A., University of Havana; M.A., New Mexico State University in Las Cruces

Paul D. Fallon, Associate Professor of Linguistics $(2005,2009)$
B.S., M.S., Georgetown University; M.A., Ph.D., The Ohio State University

Stephen J. Farnsworth, Professor of Political Science $(2012,2012)$
B.A., Dartmouth College: B.A., University of Missouri at Kansas City: M.A., Ph.D., Georgetown University

Susan R. Fernsebner, Associate Professor of History $(2004,2009)$
B.A., University of Massachusetts at Amherst; M.A., Stanford University; Ph.D., University of California at San Diego

Claudine L. Ferrell, Professor of History (1984, 2006)
B.A., M.A., Southwest Texas State University; Ph.D., Rice University

Richard Finkelstein, Professor of English $(2010,2010)$
B.A., Williams College; M.A., Ph.D., University of Chicago

Caitlin C. Finlayson, Assistant Professor of Geography $(2013,2014)$
B.A., Winthrop University; Ph.D., Florida State University

Ian Finlayson, Assistant Professor of Computer Science $(2012,2013)$
B.S., Winthrop University; Ph.D., Florida State University

Belleh Asa'ah Fontem, Assistant Professor of Operations Management $(2014,2014)$
B.S., Universitat Duisburg-Essen; M.PHIL., University of Cambridge; M.S., Ph.D., University of Alabama

Christofer C. Foss, Professor of English $(1999,2012)$
B.A., Concordia College; M.A., Northeastern University; Ph.D., University of Wisconsin at Madison
R. Leigh Frackelton, Jr., Professor of Business Law and Taxation $(1986,1998)$
B.A., Washington \& Lee University; J.D., University of Richmond; MLT, The College of William and Mary
E. Eric Gable, Professor of Anthropology $(1996,2008)$
B.A., University of California at San Diego; M.A., Ph.D., University of Virginia

Jacqueline Gallagher, Associate Professor of Geography $(2006,2010)$
B.Sc., University of Wales, College of Swansea; M.Sc., Memorial University of

Newfoundland; Ph.D., University of California at Los Angeles

Stephen G. Gallik, Professor of Biology $(1987,2003)$
B.S., M.S., Ph.D., The Pennsylvania State University

Christopher J. Garcia, Assistant Professor of Quantitative Business Methods (2012, 2012)
B.S., Old Dominion University; M.S., Nova Southeastern University; M.S., Florida Institute of Technology; Ph.D., Old Dominion University

Carole A. Garmon, Professor of Art $(1998,2010)$
BFA, MFA, Virginia Commonwealth University
Douglas T. Gately, Senior Lecturer in Music $(2005,2011)$
BLS, Mary Washington College; M.A., George Mason University
Lance C. Gentry, Associate Professor of Marketing $(2013,2013)$
B.A., Mary Baldwin College; MAT, University of Virginia; Ph.D., Virginia

Commonwealth University
Roberta A. Gentry, Assistant Professor of Education $(2012,2012)$
BSBA, MBA., University of Tennessee; Ph.D., Michigan State University
Leanna C. Giancarlo, Associate Professor of Chemistry $(1999,2005)$
B.S., University of Scranton; Ph.D., University of Pennsylvania

Kurt M. Glaeser, Associate Professor of Athletics, Health, and Physical Education (1989, 1995)
B.A., Western Maryland College; M.A., Montclair State College

James E. Goehring, Professor of Religion $(1985,1997)$
B.A., University of California at Berkeley; M.A., University of California at Santa Barbara; Ph.D., Claremont Graduate School

Rachel L. Graefe-Anderson, Assistant Professor of Finance $(2012,2012)$
B.Sc., The Pennsylvania State University; M.Sc., Ph.D., Purdue University

Theresa M. Grana, Associate Professor of Biology $(2008,2014)$
B.S., Grove City College; Ph.D., University of North Carolina at Chapel Hill
G. Robert Greene, Senior Lecturer in Management $(2004,2012)$

BBA, MBA, University of Georgia; Ph.D., Georgia State University
Steven A. Greenlaw, Professor of Economics (1982, 2000)
B.A., The College of William and Mary; M.A., Ph.D., State University of New York at Binghamton

Alan B. Griffith, Professor of Biology $(2002,2014)$
B.S., M.S., The Pennsylvania State University; Ph.D., University of Maryland

Surupa Gupta, Associate Professor of Political Science $(2008,2013)$
B.A., M.A., Jadavpur University; Ph.D., University of Southern California at Los Angeles

Mary Katherine Haffey, Assistant Professor of English $(2014,2014)$
B.S., Ohio University; M.A., Marquette University; Ph.D., University of Wisconsin at Milwaukee

Dana S. Hall, Associate Professor of Athletics, Health, and Physical Education (1990, 1996)
B.S., Frostburg State University; M.Ed., University of Virginia

Steve R. Hampton, Associate Professor of Psychology (1980, 1989)
B.S., University of Houston; M.A., Stephen F. Austin University; Ph.D., Northern Illinois University

Stephen P. Hanna, Professor of Geography $(1997,2009)$
B.A., Clark University; M.A., University of Vermont; Ph.D., University of Kentucky

Bradley A. Hansen, Professor of Economics $(1995,2009)$
B.A, The Evergreen State College; M.S., London School of Economics; M.A., Ph.D., Washington University

Bradley A. Hansen, Professor of Economics $(1995,2009)$
B.A, The Evergreen State College; M.S., London School of Economics; M.A., Ph.D., Washington University

Jennifer Hansen-Glucklich, Assistant Professor of German (2011, 2015)
B.A., Georgetown University; M.A., University of Maryland at College Park; Ph.D., University of Virginia

Jodie L. Hayob, Professor of Geology $(1993,2006)$
B.S., University of Wisconsin at Madison; M.S., Ph.D., University of Michigan at Ann Arbor
J. Todd Helbling, Senior Lecturer in Athletics, Health, and Physical Education (1999, 1999)

BBA, Millsaps College; M.S., University of Massachusetts at Amherst
Randall D. Helmstutler, Associate Professor of Mathematics $(2005,2011)$
B.S., Radford University; M.S., University of Illinois at Urbana-Champaign; Ph.D., University of Virginia

David L. Henderson, III, Associate Professor of Accounting $(2011,2015)$
B.A., Mary Washington College; M.S., The George Washington University; Ph.D., Virginia Polytechnic Institute \& State University

Christine R. Henry, Assistant Professor of Historic Preservation $(2015,2015)$ B.A., The College of William and Mary; M.Arch, The Catholic University of America; MHP, University of Maryland

William Corey Hewson, Lecturer in Athletics, Health, and Physical Education (2008, 2008)
B.S., Shippensburg University; M.Ed., University of Mary Washington

Daniel A. Hirshberg, Assistant Professor of Religion $(2014,2014)$
B.A., Wesleyan University; M.A., Naropa University; Ph.D., Harvard University

Julie A. Hodge, Associate Professor of Theatre $(1996,2002)$
BFA, Northern Kentucky University; MFA, Indiana University

Liane R. Houghtalin, Professor of Classics $(1995,2009)$
A.B., University of Michigan at Ann Arbor; M.A., Ph.D., Bryn Mawr College

Helen M. Housley, Associate Professor of Theatre $(1995,2010)$
B.A., St. Mary's College; M.A., Western Illinois University; Ph.D., University of Maryland

Daniel J. Hubbard, Associate Professor of Accounting $(1999,2006)$
A.B., Georgia State University; B.S., Georgia Institute of Technology; M.A., Middlebury College; M.Acct., Ph.D., Virginia Polytechnic Institute \& State University

Jane L. Huffman, Associate Professor of Education $(2007,2007)$
B.S., M.S., Radford University; Ed.D., Virginia Polytechnic Institute \& State University
W. Shawn Humphrey, Associate Professor of Economics $(2005,2010)$
B.A., Earlham College; M.A., Virginia Commonwealth University; M.A., Ph.D., Washington University

Debra L. Hydorn, Professor of Mathematics $(1994,2006)$
B.S., University of Michigan at Ann Arbor; M.S., University of Texas at San Antonio; Ph.D., University of Michigan at Ann Arbor

Jason C. James, Associate Professor of Anthropology $(2005,2011)$
B.A., Boston University; M.A., Ph.D., University of California at San Diego

Elizabeth A. Johnson-Young, Assistant Professor of Communication $(2015,2015)$
B.A., University of North Carolina at Greensboro; M.A., Virginia Polytechnic Institute and State University; Ph.D., North Carolina State University

Rosemary K. Jesionowski, Associate Professor of Art $(2008,2013)$
BFA, Ohio University; MFA, Indiana University
Marcus N. Kahn, Senior Lecturer in Athletics, Health, and Physical Education (2014, 2014)
B.A., University of Redlands; M.Ed., Wesley College

Teresa A. Kennedy, Professor of English $(1991,2003)$
B.A., M.A., Ph.D., The Catholic University of America

Jason A. Kilby, Lecturer in Athletics, Health, and Physical Education $(2011,2011)$ B.S., M.Ed., Frostburg State University

Joella C. Killian, Professor of Biology $(1984,1996)$
B.A., University of North Carolina at Chapel Hill; M.A., University of North Carolina at Greensboro; Ph.D., North Carolina State University
Christopher T. Kilmartin, Professor of Psychology $(1989,2001)$
B.S., M.S., Frostburg State College; M.S., Ph.D., Virginia Commonwealth University

Hui-Jung (Nora) Kim, Associate Professor of Sociology $(2009,2015)$
B.S., Korea University, South Korea; M.S., Ph.D., University of Wisconsin at Madison

George King, III, Professor of Physics $(1987,1994)$
B.A., Talladega College; M.S., Ph.D., Stanford University

Kimberley L. Kinsley, Senior Lecturer in Business Law $(2003,2012)$
B.S., University of Maryland; M.A., J.D., University of Detroit

Ben Odhiambo Kisila, Associate Professor of Geology $(2005,2009)$
B.S., Nairobi University; M.S., University of Victoria; Ph.D., University of Arkansas

David W. Kolar, Associate Professor of Psychology $(1995,2004)$
B.A., San Diego State University; M.A., Ph.D., University of California at Riverside

Janusz Konieczny, Professor of Mathematics $(1992,2004)$
M.S., Jagiellonian University; Ph.D., The Pennsylvania State University

Leonard R. Koos, Associate Professor of French $(1992,1997)$
B.A., University of California at Los Angeles; M.A., M.Phil., Ph.D., Yale University

John M. Kramer, Distinguished Professor of Political Science (1971, 1990)
B.A., LaSalle College; M.A., Ph.D., University of Virginia

Benjamin J. LaBreche, Associate Professor of English $(2009,2015)$
B.A., Ph.D., Yale University

Michael S. Lapke, Assistant Professor of Management Information Sysems (2012, 2012)
B.S., M.S., University of North Florida; Ph.D., Virginia Commonwealth Unviersity

Jeremy G. Larochelle, Associate Professor of Spanish $(2006,2012)$
B.A., The College of William and Mary; M.A., Ph.D., Rutgers, The State University of New Jersey

Elizabeth F. Larus, Professor of Political Science (1997, 2010)
B.A., Creighton University; M.A., University of Oklahoma; M.A., Ph.D., University of Virginia

Adekunle O. Lawson, Lecturer in the Department of Athletics, Health, and Physical Education $(2015,2015)$
B.S., Lynchburg College; M.S., Ohio University

Donghyun (Don) Lee, Assistant Professor of Economics $(2015,2015)$
B.S., Arizona State University; M.S., University of Wisconsin at Madison; Ph.D., University of Oregon

Jangwoon (Leo) Lee, Associate Professor of Mathematics $(2008,2014)$
B.S., Kangnam University, South Korea; M.S., Sogang University, South Korea;

Ph.D., Iowa State University
Jung-Eun (Janie) Lee, Assistant Professor of Linguistics $(2011,2011)$
B.A., Ewha Women's University, South Korea; M.A., Ph.D., University of California at Santa Barbara
J. Larry Lehman, Professor of Mathematics $(1986,1998)$
B.A., Eastern Mennonite College; Ph.D., University of Virginia

Emile J. Lester, Associate Professor of Political Science $(2006,2013)$
B.A., The George Washington University; M.Sc., London School of Economics;

Ph.D., University of Virginia
Elizabeth F. Lewis, Professor of Spanish $(1992,2011)$
B.A., Auburn University; M.A., Ph.D., University of Virginia

Lynn O. Lewis, Professor of Biology $(1989,2002)$
B.S., Ph.D., Virginia Polytechnic Institute \& State University

Miriam N. Liss, Professor of Psychology $(2001,2013)$
B.A., Wesleyan University; M.A., Ph.D., University of Connecticut

David J. Long, Professor of Music $(1980,1991)$
B.M., Arizona State University; M.M., DMA, North Texas State University

Eric G. Lorentzen, Associate Professor of English $(2004,2010)$
B.A., Rowan University; M.A., Ph.D., The Pennsylvania State University

Kenneth D. Machande, Associate Professor of Accounting $(2004,2010)$
A.A., University of Maryland; BLS, Mary Washington College;

MBA, Albany State University
Virginia H. Mackintosh, Associate Professor of Psychology $(2008,2014)$
B.A., State University of New York at Binghamton; M.S., Ph.D., Virginia Commonwealth University

Will B. Mackintosh, Assistant Professor of History and American Studies (2010, 2012)
B.A., Swarthmore College; M.A., Ph.D., University of Michigan

Jennifer Magee, Lecturer in Mathematics $(2013,2013)$
B.A., Washington and Jefferson College; M.A., Bowling Green State University

Jennifer R. Mailloux, Associate Professor of Psychology $(2003,2009)$
B.A., Fairfield University; M.A., Ph.D., State University of New York at Stony Brook

Kashef A. Majid, Assistant Professor of Marketing $(2013,2013)$
B.C., University of Ottawa; M.S., Concordia University; Ph.D., The George

Washington University
John S. Marsh, Assistant Professor of Management $(2013,2013)$
B.S., M.S., Ph.D., Rensselaer Polytechnic Insititute

Kristin L. Marsh, Associate Professor of Sociology $(2000,2006)$
B.A., M.A., Georgia State University; Ph.D., Emory University

Andrew M. Marshall, Assistant Professor of Computer Science $(2014,2014)$
B.S., New Mexico State University; M.S., Bowling Green State University; Ph.D.,

State University of New York at Albany
Leslie E. Martin, Associate Professor of Sociology $(2007,2012)$
B.A., The College of William and Mary; M.A., Temple University; Ph.D., Emory University

Louis A. Martinette, Associate Professor of Marketing $(2003,2008)$
B.S., Old Dominion University; MBA, Golden Gate University; DBA, Nova Southeastern University

Maria Isabel Martinez-Mira, Associate Professor of Spanish $(2005,2011)$
B.A., University of Murcia; M.A., Ph.D., University of Illinois at Urbana-Champaign

Mary Elizabeth S. Mathews, Associate Professor of Religion $(2000,2010)$
A.B., The College of William and Mary; M.A., Ph.D., University of Virginia

Maya Mathur, Associate Professor of English $(2006,2012)$
B.A., St. Stephen's College; M.A., Ph.D., University at Buffalo, The State University of New York

Jason P. Matzke, Associate Professor of Philosophy $(2007,2011)$
B.S., Ball State University; MAIS, Oregon State University; M.A., Ph.D., Michigan

State University
Marie E. McAllister, Professor of English $(1998,2009)$
B.A., Yale University; Ph.D., Princeton University

Christine A. McBride, Professor of Psychology $(1994,2006)$
B.A., University of Portland; M.A., Ph.D., University of California at Riverside

Venitta C. McCall, Professor of Education $(1980,2005)$
B.S., Niagara University; MBA, University of North Florida; Ed.D., Virginia

Polytechnic Institute \& State University
Jeffery W. McClurken, Professor of History $(1999,2013)$
B.A., Mary Washington College; M.A., Ph.D., The Johns Hopkins University

Kevin J. McCluskey, Associate Professor of Theatre $(2001,2007)$
BFA, University of South Dakota; MFA, Indiana University; MLS, Southern
Connecticut State University
Jonathon F. McMillan, Assistant Professor of Art $(2011,2012)$
BFA, James Madison University; MFA, Southern Illinois University at Edwardsville
George R. Meadows, Professor of Education $(1997,2012)$
B.S., Marshall University; M.S., Emory University; Ed.D., West Virginia University

Keith E. Mellinger, Professor of Mathematics $(2003,2014)$
B.S., Millersville University; M.S., Ph.D., University of Delaware

Laura H. Mentore, Assistant Professor of Anthropology (2010, 2010)
B.A., University of Virginia; Ph.D., University of Cambridge

Nina Mikhalevsky, Professor of Philosophy $(2006,2006)$
B.A., Boston University; M.A., Ph.D., Georgetown University

Krystyn R. Moon, Associate Professor of History $(2006,2010)$
B.A., Pomona College; M.A., Ph.D., The Johns Hopkins University

Caitlin E. Moore, Lecturer in Athletics, Health, and Physical Education $(2013,2013)$ B.S., MBA, University of Mary Washington

Sarah A. Morealli, Lecturer in Environmental Sciences $(2013,2013)$
B.S., Slippery Rock University; M.S., University of Pittsburgh

John T. Morello, Professor of Communication $(1989,1996)$
A.B., The College of William and Mary; M.A., Northern Illinois University; Ph.D., Wayne State University

Charles M. Murphy, Associate Professor of Political Science $(2009,2015)$
B.A., Baldwin Wallace College; M.A., Ph.D., University of California at Riverside
H. Nicole Myers, Associate Professor of Education $(2005,2008)$
B.A., George Mason University; M.Ed., University of Virginia; Ph.D., George Mason University

Hai T. Nguyen, Associate Professor of Physics $(2010,2015)$
B.S., Saint Norbert College; Ph.D., Kansas State University

Joseph W. Nicholas, Associate Professor of Geography $(1991,1997)$
B.A., Bemidji State University; M.S., University of North Dakota; Ph.D., University of Georgia

Bruce R. O'Brien, Professor of History (1990, 2003)
B.A., St. Olaf College; M.A., M. Phil., Ph.D., Yale University

Marjorie A. Och, Professor of Art $(1994,2008)$
B.A., Towson State University; M.A., University of Delaware; Ph.D., Bryn Mawr College

Deborah A. O'Dell, Associate Professor of Biology $(1992,1998)$
B.S., Ursinus College; Ph.D., State University of New York at Stony Brook

Timothy M. O'Donnell, Professor of Communication $(1999,2011)$
B.A., M.A., Wake Forest University; Ph.D., University of Pittsburgh

Jessy Jason Ohl, Assistant Professor of Communication $(2014,2015)$
B.S., Kansas State University; M.A., University of Alabama; Ph.D., University of Nebraska-Lincoln
E. Davis Oldham, Assistant Professor of Chemistry $(2013,2013)$
B.A., Lawrence University; Ph.D., University of Illinois at Urbana-Champaign

Martha Patricia Orozco Watrel, Lecturer in Spanish $(2007,2010)$
B.A., Universidad Autonoma de Nuevo Leon; M.A., University of North Dakota; M.A., George Mason University; Ph.D., The Catholic University of America

Smita Jain Oxford, Senior Lecturer in Business Communication $(2005,2005)$
B.A., Wellesley College; MBA, Columbia University; M.A., University of Maryland

Judith A. Parker, Professor of Linguistics $(1987,2008)$
B.A., Sarah Lawrence College; M.A., Ph.D., Brown University

Melina A. Patterson, Associate Professor of Geography $(2003,2010)$
B.A., Pitzer College; M.A., Ph.D., Rutgers University

Kelly W. Perkins, Lecturer in Mathematics $(2015,2015)$
B.S., Rice University; J.D., University of Houston Law School; M.S., Virginia Commonwealth University
T. Nichole Phillips, Assistant Professor of Management $(2012,2012)$
B.S., MBA, Florida A\&M University; Ph.D., University of Central Florida

Jon M. Pineda, Assistant Professor of English $(2013,2013)$
B.A., James Madison University; MFA, Virginia Commonwealth University

Angela L. Pitts, Associate Professor of Classics $(2002,2008)$
B.A., Ohio University; M.A., Ph.D., University of Wisconsin at Madison

Jennifer A. Polack, Professor of Computer Science $(1998,2010)$
B.S., University of Scranton; M.S., Pace University; Ph.D., University of South Florida

Allyson M. Poska, Professor of History $(1992,2004)$
B.A., The Johns Hopkins University; M.A., Brown University; Ph.D., University of Minnesota at Minneapolis

Scott M. Powers, Associate Professor of French $(2002,2009)$
B.S. Ed., Arizona State University; M.A., Ph.D., Tulane University

Tamie Pratt-Fartro, Associate Professor of Education $(2009,2015)$
B.S., Michigan State University; BLS, Mary Washington College; M.A., Virginia

Polytechnic Institute \& State University; Ph.D., George Mason University
Colin T. Rafferty, Associate Professor of English (2008, 2014)
B.A., Kansas State University; M.A., Iowa State University; MFA, University of Alabama
P. Anand Rao, Associate Professor of Communication $(2002,2002)$
B.A., M.A., Ph.D., University of Pittsburgh

Margaret A. Ray, Professor of Economics $(1993,2005)$
B.S., Oklahoma State University; M.A., Western Illinois University; Ph.D., University of Tennessee

Randall D. Reif, Assistant Professor of Chemistry $(2014,2014)$
B.A., St.Mary's College of Maryland; Ph.D., Texas Tech University

David A. Rettinger, Associate Professor of Psychology $(2006,2010)$
B.A., University of Michigan at Ann Arbor; M.A., Ph.D., University of Colorado at Boulder

Patricia E. Reynolds, Assistant Professor of Education $(2003,2012)$
B.A., College of Notre Dame; MATL, University of Southern Mississippi; Ph.D., Northcentral University
Gary N. Richards, Associate Professor of English $(2008,2012)$
B.A., Trinity University; M.A., Ph.D., Vanderbilt University

Lynne D. Richardson, Professor of Marketing (2011, 2011)
BBA, University of Montevallo; MBA, University of Alabama at Birmingham; Ph.D., University of Alabama

Woodrow D. Richardson, Associate Professor of Management $(2013,2013)$
B.S., Auburn University; MBA, Ph.D., University of Arkansas

Jess M. Rigelhaupt, Associate Professor of American Studies $(2008,2014)$
B.A., University of California at Santa Cruz, M.A., Ph.D., University of Michigan at Ann Arbor

Mary B. Rigsby, Professor of English $(1992,2004)$
B.A., M.A., Ph.D., Temple University
K. Wayne Riser, Lecturer in Athletics, Health, and Physical Education $(2012,2012)$
B.A., M.A., Shepherd University

Brian R. Rizzo, Associate Professor of Geography $(2007,2011)$
B.A., M.A., University of Western Ontario; Ph.D., University of Virginia

Jason M. Robinson, Assistant Professor of Art $(2014,2014)$
B.A., Pennsylvania State University; MFA, Virginia Commonwealth University

Warren G. Rochelle, Professor of English $(2000,2010)$
B.A., University of North Carolina at Chapel Hill; M.S., Columbia University; MFA, Ph.D., University of North Carolina at Greensboro

Joseph M. Romero, Professor of Classics $(2000,2015)$
B.A., Mary Washington College; Ph.D., Duke University

Marcel P. Rotter, Associate Professor of German (2004, 2010)
Diplome, Pad Hock Erfurt Muhlhausen; Ph.D., University of Wisconsin at Madison
Farhang Rouhani, Professor of Geography $(2001,2015)$
B.A., University of California at Berkeley; M.A., Ph.D., University of Arizona

Victoria K. Russell, Assistant Professor of Education $(2013,2013)$
B.A., Loyola University; M.A., M.Ed., The College of William and Mary; Ed.D., The George Washington University

Robert S. Rycroft, Professor of Economics (1977, 1989)
B.A., The College of William and Mary; M.A., Ph.D., University of Maryland

José Ángel Sáinz, Associate Professor of Spanish (2001, 2007)
B.A., Universidad de Deutso; M.A., West Virginia University; Ph.D., University of Maryland

Douglas W. Sanford, Woodard Chair and Professor of Historic Preservation (1990, 2011)
B.A., The College of William and Mary; M.A., University of Pennsylvania; M.A., Ph.D., University of Virginia

Mara N. Scanlon, Professor of English $(1999,2011)$
B.A., University of Virginia; M.A., Ph.D., University of Wisconsin at Madison

Holly H. Schiffrin, Associate Professor of Psychology $(2005,2011)$
B.S., Mary Washington College; M.S., Ph.D., University of Miami

Debra J. Schleef, Professor of Sociology $(1999,2011)$
B.A., Indiana University at Indianapolis; M.A., Ph.D., Northwestern University

Federico Schneider, Associate Professor of Italian $(2004,2009)$
Diploma, Berklee College of Music; M.A., Boston College; Ph.D., Yale University
Raymond B. Scott, Professor of Chemistry $(1984,1998)$
B.A., Hartwick College; M.S., Ph.D., University of Cincinnati

Jason R. Sellers, Assistant Professor of History $(2011,2013)$
B.A., University of California at Berkeley; M.A., Ph.D., University of California at Irvine

Charles M. Sharpless, Associate Professor of Chemistry (2004, 2009)
B.A., The Johns Hopkins University; Ph.D., Duke University

Marie P. Sheckels, Professor of Education $(1981,1999)$
B.A., Saint Mary's College; M.A., The Pennsylvania State University; Ph.D., University of Maryland

Ranjit Singh, Associate Professor of Political Science $(2004,2010)$
B.A., Mary Washington College; M.A., Georgetown University; Ph.D., University of Virginia

Kelli M. Slunt, Professor of Chemistry $(1995,2008)$
B.S., Mary Washington College; Ph.D., University of Virginia

Andréa D. Livi Smith, Associate Professor of Historic Preservation $(2008,2014)$ B.A., Brown University; M.S., University of Vermont; Ph.D., University of Maryland

Mark L. Snyder, Assistant Professor of Music $(2011,2011)$
B.A., University of Mary Washington; M.M., Ohio University; DMA, University of Memphis
Michael G. Spencer, Associate Professor of Historic Preservation $(2009,2015)$
B.A., Mary Washington College; MHP, University of Kentucky

Mukesh Srivastava, Professor of Management Information Systems $(2004,2015)$
B.S., Garhwal University, India; MBA, Jackson State University; DBA, University of Surrey, United Kingdom
W. David Stahlman, Assistant Professor of Psychology $(2012,2012)$
B.A., Franklin and Marshall College; M.A., Ph.D., University of California at Los Angeles

Michael C. Stebar, Lecturer in Biological Sciences $(2014,2014)$
B.S., The College of William and Mary; M.T., University of Virginia

Hilary E. Stebbins, Assistant Professor of Psychology (2010, 2010)
B.S., Mary Washington College; Ph.D., Brown University

Debra C. Steckler, Associate Professor of Psychology (1982, 1990)
B.A., Butler University; M.S., Ph.D., University of Georgia

Gregg Stull, Professor of Theatre (1991, 2005)
B.A., Mary Washington College; M.A., University of Maryland

Sushma Subramanian, Assistant Professor of English $(2015,2015)$
B.A., University of Southern California; M.S., Columbia University

Suzanne Sumner, Professor of Mathematics $(1992,2004)$
B.S., University of North Carolina at Chapel Hill; M.S., Ph.D., North Carolina State University

Melanie D. Szulczewski, Associate Professor of Environmental Science $(2008,2014)$
B.A., Cornell University; M.S., Ph.D., University of Wisconsin at Madison

Neil E. Tibert, Professor of Environmental Science and Geology $(2003,2015)$
B.S., M.S., Dalhousie University; Ph.D., University of Massachusetts at Amherst

Abbie M. Tomba, Associate Professor of Biology $(2006,2012)$
B.S., M.S., Bowling Green State University; Ph.D., Auburn University

Matthew K. Troy, Lecturer in Athletics, Health, and Physical Education $(2013,2013)$
B.S., M.S., West Virginia University

Cristina Turdean, Assistant Professor of Historic Preservation $(2011,2011)$
B.S., M.S., The Polytechnic Institute of Cluj-Hapoca, Romania; M.A., State

University of New York at Oneonta; M.A., Ph.D., University of Delaware
Clarence W. Tweedy, III, Associate Professor of English $(2006,2013)$
B.A., Virginia Military Institute; M.A., Ph.D., University of Kentucky

Jo Tyler, Professor of Linguistics and Education $(1999,2009)$
B.A., Michigan State University; M.Ed., University of Virginia; M.A., Ph.D., University of Florida

Craig R. Vasey, Professor of Philosophy $(1986,1999)$
B.A., Towson State College; Doctorate, Université de Paris; Ph.D., Brown University

Jennifer D. Walker, Assistant Professor of Education $(2014,2014)$
B.S., University of Mary Washington; M.Ed., Ph.D., George Mason University

Robert Parrish Waters, Assistant Professor ofBiology $(2014,2015)$
B.A., University of North Carolina at Asheville; Ph.D., University of South Dakota

Marie A. Wellington, Professor of French $(1991,2000)$
B.A., Wellesley College; A.M., Ph.D., Harvard University

Zachary N. Whalen, Associate Professor of English $(2008,2014)$
B.A., Carson-Newman College; M.A., Ph.D., University of Florida

Charles E. Whipkey, Associate Professor of Geology $(2000,2006)$
B.S., The Pennsylvania State University; M.S., North Carolina State University; Ph.D., University of Pittsburgh

Werner Wieland, Professor of Biology (1983, 1995)
B.S., M.S., Virginia Commonwealth University; Ph.D., Auburn University

Laura C. Wilson, Assistant Professor of Psychology $(2013,2013)$
B.S., Virginia Polytechnic Insitute \& State University; M.A., The College of William and Mary; Ph.D., Virginia Polytechnic Insitute \& State University

Rodrick L. Wood, Senior Lecturer in Athletics, Health, and Physical Education (1996, 1999)
B.A., Randolph-Macon College; M.Ed., National-Louis University

Grant R. Woodwell, Professor of Geology $(1986,1998)$
B.A., Columbia University; M.Phil., Ph.D., Yale University

April N. Wynn, Assistant Professor of Biology $(2015,2015)$
B.S., McMurry University; M.S., Texas A \& M University; Ph.D., North Carolina

State University
Ping Yin, Assistant Professor of Geography $(2014,2014)$
B.E., M.E., Tsinghau University (China); Ph.D., University of Georgia

Ronald A. Zacharski, Associate Professor of Computer Science $(2007,2013)$
BFA, University of Wisconsin at Milwaukee; Ph.D., University of Minnesota
Xiaofeng Zhao, Associate Professor of Management Science $(2007,2013)$
B.S., Xiam Jiaotong University; M.Phil., Northwest University (China); MBA, Indiana University of Pennsylvania; Ph.D., University of Tennessee

Deborah L. Zies, Associate Professor of Biology (2006, 2012)
B.A., Rollins College; M.S., Tulane University; Ph.D., University of Florida

## EMERITI

PRESIDENTS EMERITI
William M. Anderson, Jr., President Emeritus and Professor Emeritus of Business Administration
B.S., Virginia Commonwealth University; MPA, West Virginia College of Graduate Studies; Ed.D., Virginia Polytechnic Institute \& State University

Grellet C. Simpson, President Emeritus and Professor Emeritus of English
B.A., Randolph-Macon College; M.A., Ph.D., University of Virginia; LLD, RandolphMacon College; Litt.D., Flagler College; D.Hum.L., Mary Washington College

## VICE PRESIDENTS EMERITI

Meta R. Braymer, Vice President for Economic Development and Regional Engagement Emeritus
B.A., Maryville College; M.A., Ohio State University; Ph.D., University of Tennessee

## A. Ray Merchent, Executive Vice President Emeritus and Professor Emeritus of Education

B.A., Emory and Henry College; M.Ed., Ed.D., University of Virginia

Ronald E. Singleton, Vice President of University Relations and Communications Emeritus
B.A., The College of William and Mary; M.S., Shippensburg University of Pennsylvania; Ph.D., Virginia Commonwealth University
H. Conrad Warlick, Senior Vice President Emeritus and Professor Emeritus of Education
B.A., Wake Forest College; M.A., University of North Carolina; Ed.D., University of Virginia

Roy B. Weinstock, Vice President for Planning, Assessment, and Institutional Research Emeritus and Professor Emeritus of Psychology
B.A., Brooklyn College; M.A., Hollins College; Ph.D., Syracuse University

## DEANS EMERITI

Edward Alvey, Jr., Dean Emeritus and Professor Emeritus of Education B.A., M.A., Ph.D., University of Virginia; D.Hum.L., Mary Washington College

James H. Croushore, Dean Emeritus and Professor Emeritus of English B.A., M.A., Lehigh University; Ph.D., Yale University

Philip L. Hall, Vice President for Academic Affairs and Dean Emeritus A.B., The College of Wooster; S.M., Ph.D., The University of Chicago

Reginald W. Whidden, Dean Emeritus and Professor Emeritus of English
B.A., M.A., McMaster University; Ph.D., Yale University

Senior Associate Dean Emeritus
Robert U. MacDonald, Senior Associate Dean Emeritus
B.A., Carson-Newman College; M.S., Madison College

LIBRIARIAN EMERITUS
LeRoy S. Strohl, III, University Librarian Emeritus
B.A., Hanover College; M.A., MSLS, University of Kentucky

## DIRECTOR EMERITI

Edward H. Hegmann II, Director Emeritus and Professor Emeritus of Athletics, Health, and Physical Education B.S., Bucknell University; M.S., Springfield College; Ed.D., Temple University

John N. Pearce, Director of the James Monroe Museum and Memorial Library, Director of the James Monroe Presidential Center, and University Liaison for the Enchanted Castle Site Emeritus
B.A., Yale University; M.A., University of Delaware

## FACULTY EMERITI

Ernest C. Ackermann, Professor Emeritus of Computer Science
B.A., Montclair State College; M.A., Ph.D., The Pennsylvania State University

Clavio F. Ascari, Professor Emeritus of Italian
Dottore in Lingue e Letterature Moderne, Università Bocconi
Bulent I. Atalay, Professor Emeritus of Physics
B.S., M.S., Ph.D., Georgetown University

James E. Baker, Distinguished Professor Emeritus of Music
B.S., M.Ed., Pennsylvania State University; D.M.A., The Catholic University of America

Rachel J. Benton, Professor Emerita of Health, Physical Education and Recreation B.A., De Pauw University, M.A., Ph.D., State University of Iowa
J. Christopher Bill, Professor Emeritus of Psychology
B.S., College of the Holy Cross; M.S., University of Bridgeport; Ph.D., Dartmouth College

Julien Binford, Professor Emeritus of Art
Graduate, Art Institute of Chicago; Ryerson Fellowship for study in France; Virginia Museum Senior Fellowship; Rosenwald Fellowship

Roger J. Bourdon, Professor Emeritus of History
B.S, Loyola University of Los Angeles; M.A., Ph.D., University of California at Los Angeles

Marshall E. Bowen, Distinguished Professor Emeritus of Geography
B.Ed., Plymouth Teachers College; M.A., Kent State University; Ph.D., Boston University

Joseph Bozicevic, Professor Emeritus of Modern Foreign Languages
B.S., Juniata College; M.A., Middlebury College; Ph.D., Georgetown University

Juliette Breffort-Blessing, Professor Emerita of Modern Foreign Languages
L.ès L., University of Lille; D.E.S., University of Paris; Diplome de L'Institut d'Études Politiques de Paris; Doct. U., University of Dijon

Nathaniel Brown, Professor Emeritus of English
B.A., Princeton University; M.A., Syracuse University; Ph.D., Columbia University

Stanley F. Bulley, Professor Emeritus of Music
L.R.A.M., Royal Academy of Music; Mus.Bac., Mus.Doc., University of Toronto;
A.R.C.O., Royal College of Organists

David W. Cain, Distinguished Professor Emeritus of Religion
A.B., Princeton University; B.D., Yale University; M.A., Ph.D., Princeton University

Otho C. Campbell, Associate Professor Emeritus of History
B.A., University of Richmond; M.A., American University; Ph.D., University of Virginia

Herbert L. Cover, Professor Emeritus of Chemistry
B.S., M.S., Ph.D., University of Virginia

William B. Crawley, Jr., Distinguished Professor Emeritus of History
B.A., Hampden-Sydney College; M.A., Ph.D., University of Virginia

Judith A. Crissman, Professor Emerita of Chemistry
B.A., Thiel College; Ph.D., University of North Carolina at Chapel Hill

Steven L. Czarsty, Professor Emeritus of Business Administration
B.S., B.A., University of Hartford; M.B.A. University of Connecticut; D.B.A. George Washington University

Fredrick Davidson, Professor Emeritus of Business Administration
B.S., Texas A \& M University; MBA, Ph.D., University of Pittsburgh

Galen F. deGraff, Professor Emeritus of Management
B.S., MBA, University of Virginia; Ph.D., The George Washington University

Daniel A. Dervin, Professor Emeritus of English
B.A., Creighton University; M.A., Ph.D., Columbia University

Eileen K. Dodd, Professor Emerita of Psychology
Ph.B., Muhlenburg College; M.A., Ph.D., New York University
Mildred A. Droste, Associate Professor Emerita of Health and Physical Education
B.S., Longwood College; M.Ed., Women's College of the University of North Carolina

Albert G. Duke, Associate Professor Emeritus of Speech
A.B., M.A., Syracuse University

Samuel T. Emory, Jr., Distinguished Professor Emeritus of Geography
A.B., M.A., University of North Carolina; Ph.D., University of Maryland

Lewis P. Fickett, Jr., Distinguished Professor Emeritus of Political Science
A.B., Bowdoin College; L.L.B., M.P.A., Ph.D., Harvard University

Martha V. Fickett, Professor Emerita of Music $(1968,1996)$
B.A., Mary Washington College of the University of Virginia; M.M., University of Michigan at Ann Arbor; Ph.D., The Catholic University of America

Victor A. Fingerhut, Associate Professor Emeritus of Political Science B.A., M.A., Yale University

Delmont F. Fleming, Professor Emeritus of English
B.A., Eastern Baptist College; M.A., Ph.D., University of Pennsylvania

Stephen W. Fuller, Professor Emeritus of Biology
B.S., Cornell University; Ph.D., University of New Hampshire

James F. Gaines, Professor Emeritus of French
B.A., Michigan State University; M.A., Ph.D., University of Pennsylvania

John K. George, Professor Emeritus of Chemistry
A.B., Columbia University; M.S., University of Connecticut; M.S., Clarkson College;

Ph.D., University of Virginia
Donald E. Glover, Distinguished Professor Emeritus of English
B.A., The College of William and Mary; M.A., Ph.D. University of Virginia

Roy M. Gordon, Professor Emeritus of Athletics, Health, and Physical Education
B.A., Harpur College of the State University of New York; M.S., Springfield College

James B. Gouger, Professor Emeritus of Geography
B.A., Montclair State College; M.A., Ph.D., University of Florida

Roy F. Gratz, Distinguished Professor Emeritus of Chemistry
B.S., University of Pittsburgh; A.M., Ph.D., Duke University

Stephen L. Griffin, Professor Emeritus of Art
BFA, University of South Dakota; MFA, University of Wisconsin at Madison
Anne F. Hamer, Associate Professor Emerita of Music
B.M., University of Michigan; M.M., The Catholic University of America

Susan J. Hanna, Professor Emerita of English
B.A., Ohio State University; M.A., Ph.D., University of Michigan

Richard E. Hansen, Distinguished Professor Emeritus of English
B.A., M.S., Ph.D., Duke University

Anna Mae Harris, Associate Professor Emerita of Mathematical Sciences
B.A., Mary Washington College; M.A., University of Virginia

Diane F. Hatch, Professor Emerita of Classics
B.A., Sweet Briar College; M.A., Ph.D., University of North Carolina

Sonja Dragomanovic Haydar, Professor Emerita of Dance
Professional Dance Certificate, Zagreb State Opera Ballet School; Diploma, Meister für Tranz, Berlin; Mozarteum Conservatory of Music, Salzburg

Rosemary H. Herman, Associate Professor Emerita of Modern Foreign Languages A.B., Woman's College of the University of North Carolina; M.A., University of North Carolina

Henry W. Hewetson, Professor Emeritus of Economics
B.A., University of Toronto; M.A., University of British Columbia; Ph.D., University of Chicago

Margaret M. Hofmann, Professor Emerita of Modern Foreign Languages
A.B., Wellesley College; M.A., University of New Hampshire; Ph.D., University of Kansas

Miriam B. Hoge, Professor Emerita of Modern Foreign Languages
A.B., Randolph-Macon Women's College; M.A., Ph.D., University of Pennsylvania

Joseph E. Holmes, Associate Professor Emeritus of Mathematical Sciences
B.S., M.S., State University of New York at New Paltz; Ed.D., University of Virginia

Patricia J. Holmes, Associate Professor Emerita of Mathematics
B.A., University of Colorado; M.S., Oregon State University

Suzanne G. Houff, Professor Emerita of Education $(2000,2009)$
B.S., Longwood College; M.Ed., Virginia Commonwealth University; Ed.S., The George Washington University; Ph.D., Old Dominion University

Anna S. Hoye, Professor Emerita of Biological Sciences
A.B., Lynchburg College; M.S., Ph.D., University of Wisconsin

Margaret Williamson Huber, Distinguished Professor Emerita of Anthropology
B.A., Bryn Mawr College; B.Litt., D.Phil., Oxford University

David E. Hunt, Jr., Professor Emeritus of Theatre
B.A., State University of New York at Buffalo; MFA, University of California at Los Angeles

Rose Mary Johnson, Professor Emerita of Biological Sciences
A.B., Hood College; M.A., Ph.D., University of Virginia

Thomas L. Johnson, Professor Emeritus of Biological Sciences
B.A., Lynchburg College; M.A., Ph.D., University of Virginia
J. William Kemp, Jr., Professor Emeritus of English
B.A., Millsaps College; M.A., Mississippi State University; Ph.D., University of South Carolina at Columbia

Richard J. Krickus, Distinguished Professor Emeritus of Political Science
B.A., The College of William and Mary; M.A., University of Massachusetts; Ph.D., Georgetown University

Bernard C. Lemoine, Professor Emeritus of Music
B.M., Oberlin Conservatory of Music; M.M., University of Illinois; Ph.D., The Catholic University of America

Almont Lindsey, Professor Emeritus of History B.S., Knox College; M.A., Ph.D., University of Illinois

Stephen L. Lipscomb, Professor Emeritus of Mathematics
B.A., Fairmont State College; M.A., West Virginia University; Ph.D., University of Virginia

Kathryn E. Loesser-Casey, Professor Emerita of Biology
B.A., Drew University; Ph.D., Rutgers University and University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School
B. David MacEwen, Professor Emeritus of Psychology
B.A., LeVerne College; M.A., University of California at Los Angeles; Ph.D., Arizona State University

Bernard L. Mahoney, Jr., Distinguished Professor Emeritus of Chemistry
B.S., M.S., Boston College; Ph.D., University of New Hampshire

Carol S. Manning, Professor Emerita of English
B.A., Delta State College; M.A., University of Kentucky; Ph.D., State Universtiy of New York at Albany

Adrienne C. May, Associate Professor Emerita of Education
B.A., M.A.L.S., Mary Washington College; Ed.D,. Universtiy of Virginia

Robert L. McConnell, Professor Emeritus of Geology
B.S., M.S., University of Tennessee; Ph.D., University of California at Santa Barbara

Sammy R. Merrill, Distinguished Professor Emeritus of German
B.A., Wake Forest University; M.A., Duke University; Ph.D., Cornell University

Barbara S. Meyer, Professor Emerita of Art
B.A., Trinity University; M.A., University of Maryland; Ph.D., Johns Hopkins University

Margaret A. Mi, Professor Emerita of Marketing
BBA, MBA, Eastern New Mexico University; Ph.D., Virginia Commonwealth
University
Fred E. Miller, Associate Professor Emeritus of Economics
A.B., M.A., Colorado State College of Education

Nancy H. Mitchell, Professor Emerita of English
B.A., Swarthmore College; M.A., Yale University; Ph.D., The Catholic University of America

Sidney H. Mitchell, Professor Emeritus of English
B.A., Swarthmore College; M.A., Ph.D., University of Virginia

Thomas G. Moeller, Professor Emeritus of Psychology
B.A., Marquette University; M.A., Ph.D., University of Iowa
W. Brown Morton, III, Professor Emeritus of Historic Preservation

BAH, University of Virginia; Diplome, École des Beaux Arts
Paul C. Muick, Professor Emeritus of Art
B.F.A., Ohio State University; A.M., University of Chicago; Ph.D., Ohio State University

Lorene C. Nickel, Professor Emerita of Art
B.A., Goshen College; MFA, University of Florida

Vera Niebuhr, Associate Professor Emerita of German
B.A., Douglass College; M.A., Ph.D., University of Wisconsin at Madison

Nikola M. Nikolic, Professor Emeritus of Physics
B.S., Belgrade University; M.A., Ph.D., Columbia University

Denis Nissim-Sabat, Professor Emeritus of Psychology
B.A., Case Western Reserve University; Ph.D., Temple University

Patricia P. Norwood, Professor Emerita of Music
B.M., Wheaton College; M.M., Ph.D., University of Texas at Austin

Cornelia D. Oliver, Distinguished Professor Emerita of Art
B.A., Smith College; A.M., Duke University; Ph.D., The Catholic University of America

Joan T. Olson, Associate Professor Emerita of Sociology
B.A., Wheaton College; M.A., Michigan State University; Ph.D., Northwestern University

Richard P. Palmieri, Professor Emeritus of Geography
B.S., State College at Boston; M.A., University of Texas; Ph.D., University of California at Davis

Mary Jo Parrish, Professor Emerita of Biological Sciences
B.A., M.A., University of North Carolina; Ph.D., University of Virginia

Aniano Peña, Professor Emeritus of Modern Foreign Languages
M.A., Temple University; Ph.D., University of Pennsylvania

Larry W. Penwell, Professor Emeritus of Management and Psychology
B.A., M.A., Ph.D., University of Cincinnati

Mary W. Pinschmidt, Distinguished Professor Emerita of Biological Sciences
A.B., Western Maryland College; A.M., Duke University; Ph.D., Medical College of Virginia

William C. Pinschmidt, Jr., Professor Emeritus of Biological Sciences
B.S., Mount Union College; M.S., Ohio State University; Ph.D., Duke University

William Ray Pope, Associate Professor Emeritus of Psychology
B.S., M.A., Middle Tennesse State University; Ph.D., Virginia Commonwealth University

Alice B. Rabson, Professor Emerita of Psychology
A.B., Cornell University; M.S., Ph.D., Purdue University

Donald N. Rallis, Associate Professor Emeritus of Geography
B.A., B.S., University of the Witwatersrand; M.A., University of Miami; Ph.D., The Pennsylvania State University

Claudia M. Read, Professor Emerita of Health, Physical Education, and Recreation B.S., Women's College of the University of North Carolina; M.A., New York University

Joanna L. Reynolds, Associate Professor Emerita of Spanish
A.B., Wesleyan College; M.A., Duke University; Ph.D., George Washington University

John H. Reynolds, Professor Emeritus of Computer Science
A.S., Eastern Oklahoma A \& M; B.S. Southeastern State College; M.S., State University of New York at Stony Brook

Carmen L. Rivera, Professor Emerita of Modern Foreign Languages
B.A., University of Puerto Rico; M.A., Florida State College for Women; Ph.D., University of Salamanca

Key Sun Ryang, Professor Emeritus of History
B.A., Trinity University; M.A., Ph.D., University of Maryland

Raman K. Singh, Professor Emeritus of English
B.A., Saint Stephen's College; M.A., Western Michigan University; Ph.D., Purdue University

Paul C. Slayton, Jr., Distinguished Professor Emeritus of Education
B.S., M.Ed., Ed.D., University of Virginia

Roy H. Smith, Distinguished Professor Emeritus of Psychology
B.S., University of Tennessee; Ph.D., University of Pennsylvania

Charles A. Sletten, Professor Emeritus of Sociology
B.A., University of Virginia; A.M., Ph.D., Harvard University

David S. Soper, Associate Professor Emeritus of Athletics, Health, and Physical Education
B.S., M.Ed., Frostburg State College

Stephen P. Stageberg, Associate Professor Emeritus of Economics
BSFS, M.A., Ph.D., Georgetown University
Gary W. Stanton, Associate Professor Emeritus of Historic Preservation
B.A., University of California at Santa Barbara; M.A., Ph.D., Indiana University

Mary Ellen Stephenson, Professor Emerita of Modern Foreign Languages
B.A., Westhampton College; M.A., Middlebury College; Ph.D., University of Chicago

Glen R. Thomas, Professor Emeritus of American Studies
B.A., Stanford University; M.A., American University; Ph.D., Emory University

Arthur L. Tracy, Associate Professor Emeritus of History and American Studies
B.A., Barrington College; M.A., Ph.D., American University

Joseph C. Vance, Professor Emeritus of History
B.A., M.A., Ph.D., University of Virginia

George Montgomery Van Sant, Distinguished Professor Emeritus of Philosophy A.B., St. John's College; M.A., Ph.D., University of Virginia

Brenda E. Vogel, Professor Emerita of Education
BFA, Virginia Commonwealth University; M.A.Ed., Ed.D., Virginia Polytechnic
Institute and State University

Richard H. Warner, Professor Emeritus of History
A.B., Dartmouth College; M.A., Ph.D., New York University

Stephen H. Watkins, Professor Emeritus of English
B.A., M.A., Ph.D., Florida State University

Katharine F. Wells, Associate Professor Emerita of Health, Physical Education, and Recreation
B.S., New York University; Ed.M., Boston University; M.S., Wellesley College; Ph.D., State University of Iowa

Janet F. Wishner, Professor Emerita of Philosophy
B.A., University of Leeds; M.A., Bedford College, University of London; Ph.D., University of Georgia

Lawrence Wishner, Professor Emeritus of Chemistry
B.A., M.A., Ph.D., University of Maryland

Rebecca T. Woosley, Associate Professor Emerita of Health and Physical Education
A.B., Women's College of the University of North Carolina; B.S., Mary Washington College; M.S., Louisiana State University

Marsha F. Zaidman, Associate Professor Emerita of Computer Science
B.S., Brooklyn College; M.S., The George Washington University

Janet G. Zeleznock, Associate Professor Emerita of Mathematics
B.S., Saint Francis College; M.A., Duquesne University

Benjamin F. Zimdars, Professor Emeritus of History
B.A., North Central College; M.A., University of Wisconsin; Ph.D., University of Texas

Paul M. Zisman, Professor Emeritus of Education
B.A., The College of William and Mary; M.A.T., Howard University; Ph.D., The Catholic University of America

Six University awards are presented each year to outstanding members of the faculty. The first four awards listed are presented at the Commencement ceremonies. The "Topher" Bill Award is presented at the opening general faculty meeting at the start of each fall semester. The Waple award is at the closing general faculty meeting in April.

## GRELLET C. SIMPSON AWARD

Established in 1972, the Grellet C. Simpson Award reflects the importance placed by the University on its primary mission as an undergraduate, teaching institution. Named for former President Grellet C. Simpson, this award was made possible by an anonymous donor and is presented to a faculty member in recognition of excellence in undergraduate teaching. The faculty rank shown is the person's rank at the time of the award.

## 1972 Carmen L. Rivera, Professor of Modern Foreign Languages

1973 Sidney H. Mitchell, Professor of English
1974 Anna S. Hoye, Professor of Biology
1975 Earl G. Insley, Professor of Chemistry
1976 Donald E. Glover, Professor of English
1977 Glen R. Thomas, Professor of American Studies
1978 Nancy H. Mitchell, Professor of English
1979 Elizabeth A. Clark, Professor of Religion
1980 Janet G. Zeleznock, Associate Professor of Mathematical Sciences
1981 Arthur L. Tracy, Associate Professor of History
1982 Mary W. Pinschmidt, Professor of Biology
1983 Joseph C. DiBella, Associate Professor of Art
1984 Bernard L. Mahoney, Jr., Professor of Chemistry
1985 Susan J. Hanna, Professor of English
1986 George M. Van Sant, Professor of Philosophy
1987 Marshall E. Bowen, Professor of Geography
1988 Joanna L. Reynolds, Associate Professor of Modern Foreign Languages
1989 Roger J. Bourdon, Professor of History
1990 Michael J. Joyce, Associate Professor of Dramatic Arts
1991 Richard M. Zeleznock, Assistant Professor of Mathematics
1992 David W. Cain, Professor of Religion
1993 Sammy R. Merrill, Professor of Modern Foreign Languages
1994 William B. Crawley, Jr., Distinguished Professor of History
1995 Lewis P. Fickett, Jr., Distinguished Professor of Political Science
1996 Carol S. Manning, Professor of English
1997 Topher Bill, Professor of Psychology
1998 Bulent I. Atalay, Professor of Physics

1999 Steven A. Greenlaw, Associate Professor of Economics
2000 William Kemp, Professor of English
2001 Clavio F. Ascari, Professor of Italian
2002 Steve R. Hampton, Associate Professor of Psychology
2003 Rosemary Barra, Professor of Biology
2004 John H. Reynolds, Professor of Computer Science
2005 David J. Long, Professor of Music
2006 John M. Kramer, Distinguished Professor of Political Science
2007 Thomas G. Moeller, Professor of Psychology
2008 Margaret Huber, Distinguished Professor of Anthropology
2009 Jean Ann Dabb, Associate Professor of Art History
2010 Gregg Stull, Professor of Theatre
2011 Teresa A. Kennedy, Professor of English
2012 Dawn S. Bowen, Professor of Geography
2013 Joella C. Killian, Professor of Biology
2014 Mara N. Scanlon, Professor of English
2015 Liane R. Houghtalin, Professor of Classics

## ALUMNI ASSOCIATION OUTSTANDING YOUNG FACULTY MEMBER AWARD

The Alumni Association Outstanding Young Faculty Member Award, established in 1989, recognizes the achievement and contribution of a faculty member who has been at the University from two to five years. The faculty rank shown is the person's rank at the time of the award.

1989 James E. Goehring, Assistant Professor of Religion
1990 George King, III, Associate Professor of Physics
1991 Grant R. Woodwell, Assistant Professor of Geology
1992 Larry W. Penwell, Assistant Professor of Psychology
1993 John T. Morello, Associate Professor of Speech
1994 Suzanne Sumner, Assistant Professor of Mathematics
1995 Gregg Stull, Assistant Professor of Theatre
1996 Janusz Konieczny, Assistant Professor of Mathematics
1997 Mehdi Aminrazavi, Assistant Professor of Philosophy and Religion
1998 W. Gardner Campbell, Assistant Professor of English
1999 Christine A. McBride, Assistant Professor of Psychology
2000 Kelli M. Slunt, Assistant Professor of Chemistry
2001 Stephen J. Farnsworth, Assistant Professor of Political Science
2002 Carole A. Garmon, Assistant Professor of Art
2003 Claudia Emerson, Associate Professor of English
2004 Leanna C. Giancarlo, Assistant Professor of Chemistry
2005 Miriam N. Liss, Assistant Professor of Psychology
2006 Craig T. Naylor, Assistant Professor of Music

## MARY W. PINSCHMIDT AWARD

Members of the senior class select the winner of the Mary W. Pinschmidt award. Established in 1999 in honor of a long-time professor of biology, this award recognizes the faculty member who seniors select as the person they will most likely remember as the one who had the greatest impact on their lives. The faculty rank shown is the person's rank at the time of the award.

1999 Stephen J. Farnsworth, Assistant Professor of Political Science
2000 Werner Wieland, Professor of Biology
2001 Erin H. Fouberg, Assistant Professor of Geography
2002 Topher Bill, Professor of Psychology
2003 Gregg Stull, Associate Professor of Theatre
2004 José Ángel Saínz, Assistant Professor of Spanish
2005 William B. Crawley, Jr., Distinguished Professor of History
2006 Claudia Emerson, Associate Professor of English
2007 Kenneth D. Machande, Assistant Professor of Business Administration
2008 W. Brown Morton III, Professor of Historic Preservation
2009 Jean Ann Dabb, Associate Professor of Art History
2010 Stephen C. Davies, Assistant Professor of Computer Science
2011 Chad M. Murphy, Assistant Professor of Political Science
2012 Gary N. Richards, Assistant Professor of English
2013 Daniel J. Hubbard, Associate Professor of Accounting
2014 Lynn O. Lewis, Professor of Biology
2015 Maria Isabel Martinez-Mira, Associate Professor of Spanish

## GRADUATE FACULTY AWARD

Established in 2003, this award recognizes an exceptional full-time faculty member who demonstrates excellence in graduate teaching and professional leadership in a graduate program. The person selected must have served in a full-time position at the University for at least two years. The faculty rank shown is the person's rank at the time of the award.

2003 Andrew Blair Staley, Assistant Professor of Leadership and Management 2004 Jo Tyler, Associate Professor of Linguistics and Education

Alan G. Heffner, Professor of Leadership and Management
Norah S. Hooper, Associate Professor of Education
Gail D. Brooks, Associate Professor of Computer Information Systems Brenda E. Vogel, Professor of Education
Kimberley L. Kinsley, Assistant Professor of Leadership and Management Suzanne Houff, Professor of Education Laurie B. Abeel, Associate Professor of Education Mukesh Srivastava, Associate Professor of Management Information Systems Louis A. Martinette, Associate Professor of Marketing
Beverly D. Epps, Associate Professor of Education
G. Robert Greene, Senior Lecturer in Management

## J. CHRISTOPHER "TOPHER" BILL FACULTY SERVICE AWARD

The Topher Bill Award recognizes outstanding faculty service. Nominees must have served a minimum of seven years as a member of the Mary Washington teaching faculty and must have been heavily and consistently involved in a variety of service roles through department, college, university, and/or community service activities. This award is presented annually at the opening general faculty meeting in August. Faculty rank shown is at the time of the award.

2003 Sammy R. Merrill, Distinguished Professor of German
2004 Roy H. Smith, Distinguished Professor of Psychology
2005 Patricia P. Norwood, Professor of Music
2006 Raymond B. Scott, Professor of Chemistry
2007 Martha V. Fickett, Professor of Music
2008 Debra L. Hydorn, Professor of Mathematics
2009 Ana G. Chichester, Associate Professor of Spanish
2010 Kelli M. Slunt, Professor of Chemistry
2011 Ernest C. Ackermann, Professor of Computer Science
2012 Jeffrey W. McClurken, Associate Professor of History
2013 Craig R. Vasey, Professor of Philosophy
2014 Louis A. Martinette, Associate Professor of Marketing

## WAPLE FACULTY PROFESSIONAL ACHIEVEMENT AWARD

First presented in 2013, this award recognizes a full-time faculty member for the significance/impact of their scholarly, creative, and/or professional achievement(s). The recipient must have at least seven years employment at UMW. This award is presented annually at the closing general faculty meeting in April. The faculty rank shown is the person's rank at the time of the award.

[^8]
## ACADEMIC CALENDAR

## FALL SEMESTER 2015

Returning students move in by date assigned by

Residence Life
Residence hall open for entering freshmen and new transfer students

Honor Convocation
Classes begin (8 a.m.)
Last day to add courses (by 5 p.m.)
16 -week semester and 1 st. 8 -week term
Last day to drop 1st. 8-week term course without grade of W

Last day to drop 16-week semester courses without grade of W

Last day to withdraw from 1st. 8-week term course without a grade of F
Last day to change to/from a pass/fail grade for 1st. 8-week term
Family Weekend
Declaration of major is due (B.A./B.S. students only)
Classes end for 1st. 8-week term
Last day to withdraw from the University (all courses) if registered for a 1 st 8 -week course (students may not be enrolled for 2 nd 8 -week session if withdrawing from 1 st 8 -week session)
*Fall Break ( 16 week semester) begins at 5 p.m.; residence halls remain open

Final exams for 1 st. 8 -week term classes
Fall Break ends; classes resume at 8 a.m.
Pre-Registration Advising
2nd. 8-week term classes begin
Last day to withdraw from a 16 -week course without a grade of F; last day to change from/to pass/fail grade (16-week semester courses)

Last day to add courses for 2nd 8-week term
Homecoming Weekend

Thursday-Sunday August 20-23

Thursday, August 20
Friday, August 21
Monday, August 24

Friday, August 28

Wednesday, September 2

Friday, September 11

Friday, September 18

Friday, September 18
Friday-Sunday, September 18-20
Tuesday, September 22
Friday, October 9

## Friday, October 9

## Friday, October 9

Monday-Friday, October 12-16
Wednesday, October 14
Wednesday - Friday, October 14-23
Monday, October 19

Friday, October 23
Friday, October 23
Friday-Saturday, October 23-24

## FALL SEMESTER 2015 (continued)

Advance registration for upcoming Spring semester

Monday-Friday, October 26-November 6
Last day to drop a 2 nd 8 -week course without a grade of W

Last day to withdraw from a 2nd. 8-week term course without a grade of F

Wednesday, October 28

Last day to change to/from pass/fail grade for 2nd. 8-week term

Friday, November 13
*Thanksgiving Break begins at 8 a.m.;
residence halls (except Eagle Landing)
close at 10 a.m.
Residence halls open at 2 p.m.
Thanksgiving Break ends; classes resume at 8 a.m.
Friday, November 13

Wednesday, November 25
Sunday, November 29
Monday, November 30
Classes end; last day to withdraw from the University(if registered for 16-week courses and/or 2nd. 8-week term courses if no grade was awarded for a 1st 8 -week term course)

Reading Period
Friday, December 4
Saturday-Sunday, December 5-6
Final Examinations (16-week and 2nd. 8-week term)
Residence halls (except Eagle Landing)
close at 10 a.m.
Monday-Friday, December 7-11

Saturday, December 12
*Out-of-state and international students may contact the Office of Residence Life and Housing to investigate possible housing options during Break.

## SPRING SEMESTER 2016

Residence halls open 9 a.m.-12 noon for new students
New Student Orientation (B.A./B.S. students only)
Friday, January 8

Residence halls open 9 a.m.-5 p.m.
for returning students
Sunday, January 10
Classes begin ( 16 week semester and 1st 8 week term)
Late registration (16-week semester)
Monday, January 11
Monday, January 11
Last day to add courses (by 5 p.m.),
16 -week term and 1 st. 8 -week term
Friday, January 15
Martin Luther King Jr. Day (no classes)
Monday, January 18
Last day to drop 1st. 8-week class
without grade of W
Wednesday, January 20
Last day to drop 16-week semester course(s)
without grade of W
Friday, January 29
Declaration of major is due (B.A./B.S. students only)
Thursday, February 4
Last day to withdraw from 1st. 8 week term course without a grade of F

Wednesday, February 10

## SPRING SEMESTER 2016 (continued)

Last day to change to or from pass/fail grading (1 st. 8-week courses)

Last day of classes for 1st 8-week term
Last day to withdraw from the University (all courses) if registered for a 1 st 8 -week course (students may not be enrolled for 2 nd 8 -week session if withdrawing from 1 st 8 -week session)
*Spring Break (for 16 week semester) begins at 5 p.m.; residence halls (except for Eagle Landing) close at 9 p.m.

Final exams for 1st 8-week term
Residence halls open at 2 p.m.
Spring Break ends; classes resume at 8 a.m.
Classes begin (2nd 8-week term)
Registration for upcoming Summer semester begins
Pre-Registration Advising
Last day to register for 2nd. 8-week term courses
Exit Survey of currently enrolled graduating students
Last day to drop 2nd 8-week term course without grade of W
Last day to withdraw from a 16-week course without a grade of F ; last day to change from/to pass/fail grade (16-week semester courses);

Advance registration for upcoming Fall semester
Last day to change from/to pass/fail grading in 2nd 8-week term classes

Last day to withdraw from 2nd. 8-week term course without a grade of F
Multicultural Fair
Classes end; Last day to withdraw from the University if registered for 16-week courses and/or 2nd 8-week courses if no grade has been received in 1st 8-week term

Reading Period
Final Examinations (16-week semester and 2nd. 8-week term)

All residence halls close at 10 a.m.
(except for graduating seniors)
Graduate Commencement
Undergraduate Commencement
Residence halls close at 10 a.m. (for graduating seniors)

Friday, April 22
Saturday-Sunday, April 23-24
Wednesday, February 10
Friday, February 26

Friday, February 26

Friday, February 26
Monday-Friday, February 29 - March 4
Sunday, March 6
Monday, March 7
Monday, March 7
Monday, March 7
Monday - Friday, March 7-18
Friday, March 11
Monday-Sunday, March 14 - March 27

Wednesday, March 16
Friday, March 18

Monday-Friday, March 21-April 1

Wednesday, April 6
Wednesday, April 6

Saturday, April 9

Monday-Friday, April 25-29

Saturday, April 30
Friday, May 6
Saturday, May 7

Sunday, May 8
*Out-of-state and international students may contact the Office of Residence Life and Housing to investigate possible housing options during Break.

## MAY/JUNE FIVE-WEEK SUMMER TERM 2016

Residence halls open at 2 p.m.
Classes begin (8 a.m.)
Last day to add courses for 1st 5-week term(by 5 p.m.)
Last day to drop courses without a grade of W
Memorial Day (no classes)
(Daytime classes made up on Friday, June 3)
(Evening classes made up on first open evening)
Last day to change from to pass/fail grade
Last day to withdraw from a course without a grade of F
Reunion Weekend
Classes end; last day to withdraw from this term
Reading Period
Examinations
Residence halls close at 10 a.m.

Friday, May 13
Monday, May 16
Wednesday, May 18
Tuesday, May 24
Monday, May 30

Tuesday, May 31

Tuesday, May 31
Friday-Sunday, June 3-5
Tuesday, June 14
Wednesday, June 15
Thursday, June 16
Friday, June 17

## EIGHT-WEEK SUMMER TERM 2016

Residence halls open at 2 p.m.
Classes begin (8 a.m.)
Last day to add courses (by 5 p.m.)
Last day to drop courses without a grade of W
Memorial Day (no classes)
(Daytime classes made up on Friday, June 3)
(Evening classes made up on first open evening)

Reunion Weekend
Last day to withdraw from a course without a grade of F

Last day to change from/to a pass/fail course
without a grade of F
Last day to withdraw from this term
Independence Day (no classes)
(Daytime classes made up on Friday, June 8)
(Evening classes made up on first open evening)
Classes end

Friday, May 13
Monday, May 16
Friday, May 20
Friday, May 27
Monday, May 30

Friday-Sunday, June 3-5

Friday, June 3

Friday, June 3
Friday, July 1
Monday, July 4

Friday, July 8
*Registration for all summer terms begins on Monday, March 7, 2016.

# TEN-WEEK SUMMER TERM 2016 

## Classes begin (8 a.m.)

Last day to add courses (by 5 p.m.)
Last day to drop courses without a grade of W
Memorial Day (no classes)
(Daytime classes made up on Friday, June 3)
(Evening classes made up on first open evening)
Reunion Weekend
Last day to withdraw without a grade of F ;
last day to change to/from pass/fail grade
Independence Day (no classes)
(Daytime classes made up on Friday, June 8)
(Evening classes made up on first open evening)
Classes end; last day to withdraw from this term

Monday, May 16
Friday, May 20
Friday, May 27
Monday, May 30

Friday-Sunday, June 3-5

Friday, June 24
Monday, July 4

Thursday, July 21

## JUNE/JULY FIVE-WEEK SUMMER TERM 2016

Residence halls open at $2 \mathrm{p} . \mathrm{m}$.
Classes begin (8 a.m.)
Last day to add courses (by 5 p.m.)
Last day to drop courses without a grade of W
Independence Day (no classes)
(Daytime classes made up on Friday, June 8)
(Evening classes made up on first open evening)
Last day to withdraw from a course without a grade of F; last day to change to/from pass/fail grade
Classes end; last day to withdraw from this term
Reading Period
Examinations
Residence halls close at $10 \mathrm{a} . \mathrm{m}$.

Sunday, June 19
Monday, June 20
Wednesday, June 22
Tuesday, June 28
Monday, July 4

Tuesday, July 5
Tuesday, July 19
Wednesday, July 20
Thursday, July 21
Friday, July 22

## INDEX

Academic Advising ..... 46
Academic Calendar ..... 285
Academic Dismissal ..... 71
Academic Disputes ..... 66
Academic Distinction ..... 54
Academic Honors ..... 53
Academic Progression Policy ..... 29, 59
Academic Records ..... 55
Actuarial Science ..... 168
Administration, Directory of ..... 250
Admission ..... 13-21
Advanced Placement (AP) ..... 16, 61
American Studies ..... 93
Anthropology ..... 94
Arabic ..... 97
Art History ..... 98
Art, Studio ..... 98
Arts Administration ..... 206
Arts and Sciences, College of ..... 81
Arts, Literature, and Performance Requirements ..... 84. 89, 90
Asian Studies ..... 103
Asian Studies, Leidecker Center for ..... 50
Athletics ..... 37
Attendance ..... 58
Audit Fee and Auditing a Course ..... 24, 59
Bachelor of Arts, Bachelor of Science Programs ..... 83
Bachelor of Liberal Studies Program ..... 212
Bachelor of Science in Nursing (degree completion program) ..... 224
Billing ..... 25
Biology ..... 104
Board of Visitors ..... 249
Bookstore ..... 36
Business, College of ..... 231
Business Administration ..... 234
Cambridge Examinations ..... 16, 61
Campuses ..... 9
Career Services ..... 41
Chemistry ..... 109
Chinese ..... 111
Class Standing ..... 59
Classics ..... 112
Classification as a Virginia Student ..... 26
Colgate W. Darden Award ..... 54
College Level Examination Placement (CLEP) ..... 48, 61, 215, 228
Commencement ..... 59
Communication ..... 114
Community Service/Service Learning ..... 36
Community Values, Statement of. ..... 7
Commuter Student Services ..... 34
Computer Science ..... 116
Continuing at the University ..... 59
Corequisite ..... 70
Course Changes ..... 60
Counseling and Psychological Services Center ..... 35
Creative Writing ..... 127
Credit Through Examination and Placement ..... 61
Dance ..... 121
Data Sciences ..... 121
DANTES ..... 61, 215, 228
Dean's List ..... 53
Debate ..... 114
Deferred Enrollment ..... 15
Degree Requirements
B.A./B.S. degrees ..... 83
BLS degree ..... 213
BSN degree ..... 225
Delinquent Accounts ..... 26
Departmental Honors ..... 54
Deposits ..... 25
Digital Knowledge Center ..... 44
Digital Studies ..... 122
Directory Information ..... 55
Disabilities Resources ..... 47
Dismissal. ..... 71
Diversity and Inclusion, Statement of. ..... 8
Dual Enrollment ..... 16
EagleOne card ..... 23
Economic Development, Center for ..... 10
Economic Education, Center for ..... 48
Economics ..... 123
Education Abroad ..... 24, 42, 49
Education, College of ..... 242
Education Records ..... 56
Electives ..... 85
Emeriti, Directory of ..... 272
English ..... 126
Environmental Science ..... 132
Experiential Learning Requirement ..... 84, 91
Faculty Awards ..... 281
Faculty, Directory of ..... 256
Family Educational Rights and Privacy Act (FERPA ..... 56
Final Examinations ..... 63
Financial Aid ..... 29
First-Year Seminar Requirement ..... 84, 87, 136
French ..... 137
Full-Time Student ..... 64
Galleries ..... 52
General Education Requirements, B.A./B.S. Degree Programs ..... 83
General Education Requirements, BLS Degree Program ..... 212
General Education Requirements, BSN Degree Completion Program ..... 2256
Geography ..... 139
Geographic Information (GIS) Certificate ..... 140
Geology ..... 144
German ..... 147
Global Inquiry Requirement ..... 84, 88, 213
Grade Appeals (Academic Disputes) ..... 66
Grade-Point Average ..... 65
Grading and Grade Reports ..... 64
Graduate Courses, Undergraduates Taking ..... 87
Graduate Faculty Award ..... 283
Graduate Programs ..... 79
Greek ..... 149
Grellet C. Simpson Award ..... 281
Guaranteed Admission Agreement ..... 18
Health Center ..... 35
Health Education ..... 149
History and Development of the University ..... 6
Historic Preservation, Center for ..... 49
Historic Preservation, Department of ..... 150
History ..... 152
Honor, Leadership, and Service, Center for ..... 36
Honor System ..... 9
Honors Program ..... 54, 158
Human Experience and Society Requirement. ..... 84, 90, 213
Incomplete Grade ..... 67
Information Technologies ..... 45
Interdisciplinary Courses ..... 159
Interdisciplinary Science Studies ..... 161
International Affairs ..... 161
International Baccalaureate (IB) ..... 16, 61
International Education, Center for. ..... 49
International Students and Programs ..... 42
Internships. ..... 40, 67
Italian ..... 162
J. Christopher "Topher" Bill Award ..... 284
James Farmer Multicultural Center ..... 34
Judicial Affairs. ..... 37
Jury duty and class attendance. ..... 58
Language Requirement ..... 84, 89
Latin ..... 163
Latin American Studies ..... 164
Leadership and Media Studies, Center for ..... 50
Learning Goals, Arts and Science Curriculum ..... 82
Leave of Absence ..... 68
Libraries ..... 39
Linguistics ..... 164
Major Program, B.A./B.S. degrees ..... 83
Majors
Accounting ..... 234
American Studies ..... 93
Anthropology ..... 94
Art History ..... 98
Biology ..... 104
Business Administration ..... 234
Chemistry ..... 109
Classical Archaeology ..... 113
Classical Civilization ..... 112
Communication and Digital Studies ..... 114
Computer Science ..... 117
Economics ..... 124
English ..... 127
Environmental Geology ..... 145
Environmental Science ..... 133
French ..... 137
Geography ..... 140
Geology ..... 145
German ..... 147
Historic Preservation ..... 150
History ..... 153
Interdisciplinary Science Studies ..... 161
International Affairs ..... 162
Latin ..... 163
Leadership and Management Studies (open to BLS students only) ..... 217
Marketing ..... 234
Mathematics ..... 167
Music ..... 174
Philosophy ..... 178
Physics ..... 186
Political Science ..... 188
Psychology ..... 192
Religion ..... 197
Sociology ..... 199
Spanish ..... 203
Studio Art ..... 98
Theatre ..... 206
Women's and Gender Studies ..... 210
Mandatory Processing Fee ..... 24
Mathematics ..... 167
Meal Plans ..... 23
Middle Eastern Studies ..... 170
Military Service, Policies for Students in ..... $15,26,27,28,30,74,77,212$
Military Science ..... 171
Minor Program Requirements ..... 86
Minors
Actuarial Science ..... 168
Applied Mathematics ..... 167
Arts Administration ..... 206
Asian Studies ..... 103
Biology ..... 105
Business Administration ..... 234
Business French ..... 137
Business German ..... 147
Business Spanish ..... 203
Chemistry ..... 110
Computer Science ..... 117
Data Sciences ..... 121
Digital Studies ..... 122
Economics ..... 124
Environmental Sustainability ..... 133
French ..... 137
German ..... 148
Latin American Studies ..... 164
Linguistics ..... 164
Mathematics ..... 167
Middle Eastern Studies ..... 170
Musical Theatre ..... 206
Museum Studies ..... 173
Neuroscience ..... 192
Physics ..... 186
Practical Ethics. ..... 179
Pre-Conservation in Fine Art ..... 190
Security and Conflict Studies ..... 188
Social Justice ..... 199
Sports Management ..... 183
Urban Studies ..... 209
Modern Languages and Literatures ..... 172
Mortar Board ..... 54
Multicultural Student Affairs ..... 34
Museum Studies ..... 173
Music ..... 174
Natural Science Requirement ..... 84, 88, 212
Non-Degree Student ..... 69
Non-Discrimination, Statement of ..... 11
Outcomes Assessment ..... 42
Overload ..... 69
Pass/Fail Grade ..... 69
Phi Beta Kappa. ..... 54
Philosophy ..... 178
Physical Education ..... 183
Physics ..... 186
Pinschmidt Award ..... 283
Police ..... 37
Political Science ..... 188
Portfolio Credit (BLS Program) ..... 214
Pre-Conservation in Fine Art ..... 190
Prerequisite ..... 70
President's List. ..... 53
Probation ..... 71
Psychology ..... 191
Quantitative Reasoning Requirement ..... 84, 87, 212
Readmission/Reinstatement ..... 73
Recreation and Fitness Center ..... 35
Refund of Fees ..... 26
Religion ..... 196
Repeating a Course ..... 74
Residence Life ..... 33
Residence Requirement ..... 83
Residential Fee ..... 23
Satisfactory Academic Progress Policy ..... 29
Satisfactory/Unsatisfactory Grade ..... 75
Scholarship and Loan Awards ..... 25, 30
Second Degree or Second Major (post baccalaureate) ..... 86, 213
Senior Citizens ..... 27
Service Learning ..... 36
Sociology ..... 199
Spanish ..... 202
Spatial Analysis and Research, Center for. ..... 50
Speaking Center ..... 44
Speaking Intensive Course Requirement ..... 84, 92, 213
Specialized Advisors ..... 46
Sports Management ..... 183
Student Activities and Organizations ..... 33
Student Government. ..... 33
Study Abroad ..... 24, 42, 49
Summer Session ..... 41
Suspension ..... 71
Teacher Education Program ..... 243
Teaching and Learning Technologies, Division of ..... 51
Teaching Excellence and Innovation, Center for ..... 51
Theatre ..... 205
Transfer Courses, Deadlines, and Policies ..... 75, 86, 215, 227
Tuition and Fees ..... 23
Tutoring ..... 46
Undergraduate Research and Grant Program ..... 43, 208
University Mission Statement ..... 5
University Honors ..... 54
Urban Studies ..... 209
Veterans Benefits ..... 28
Virginia Military Survivors and Dependents Education Program. ..... 27
Virginia State Policy on Transfer. ..... 17
Virginia Student, Classification as ..... 26
Waple Faculty Professional Achievement Award. ..... 284
Withdrawal for a Term, Voluntary ..... 77
Withdrawal from the University ..... 77
Women's and Gender Studies. ..... 210
Writing Center ..... 43
Writing Intensive Course Requirement. ..... 84. 92, 213
Young Faculty Member Award ..... 282
PHOTO CREDITS
All photos by Norm Shafer
COLOPHONLayout and design by AJ Newell and John T. Morello.Edited by John T. Morello with invaluable assistance by Amy J. O'Reilly, Virginia E.Irvin, and AJ Newell.


[^0]:    Anthropology 101, 318
    Art History 460
    Classics 110, 211, 310

[^1]:    372 - Contemporary Drama and Performance Studies (3)
    Studies in the forms, themes and politics of contemporary dramatic literature from roughly 1960 to the present, with special emphasis on its relation to competing notions of performance and theatre.

[^2]:    * Course descriptions for GEOG 250, 340, 351, and 355 can be found in this section of

[^3]:    307 - How Things Work: Engineering and the Design Process (3)
    Prerequisite: Junior or Senior class standing.
    This course provides an introduction to the E

[^4]:    302 - Introduction to Sociolinguistics and Anthropological Linguistics (3)
    Prerequisite: LING 101. The course examines the relationship between language and society. At the micro level, the emphasis is on social

[^5]:    210 -Social and Political Philosophy (3)
    Introduction to classical, modern, and contemporary social and political theories as well as issues in a global context.

[^6]:    Requirements for the Arts Administration Minor ( 15 credits)
    ACCT 101, MGMT 301 or MKTG 301; THEA 281, 481, and three (3) credits in THEA 390 or 499.

[^7]:    Note: Dates in parentheses indicate year of appointment to staff and year when present rank and/or title was attained. This listing includes all full-time, continuing teaching faculty of the University of Mary Washington as of June 1, 2015.

[^8]:    2013 Claudia Emerson, Professor of English
    2014 Mindy J. Erchull, Associate Professor of Psychology
    2015 Christopher T. Kilmartin, Professor of Psychology

