Although this catalog and any other information conveyed to students or to prospective students were prepared on the basis of the best information available at the time of publication, all information, including statements of tuition and fees, course offerings, admissions, and graduation requirements, is subject to change without notice or obligation. It is each student’s responsibility to know all the rules, regulations, requirements, and academic policies of George Mason University. If doubt should arise with regard to any matter, it is the further responsibility of the student to consult with a faculty adviser or the Dean of the Graduate School.

George Mason University is accredited by the Southern Association of Colleges and Schools as a university approved to offer graduate programs at the master’s level, and is a member of the Council of Graduate Schools in the United States.

George Mason University is an Equal Opportunity/Affirmative Action institution committed to the principle that access to study or employment opportunities afforded by the University, including all benefits and privileges, be accorded to each person—student, faculty or staff member—on the basis of individual merit and without regard to race, color, religion, national origin, sex or age (except where sex or age is bona fide occupational qualification.) This principle shall be promoted in every phase of University operations by institution of procedures necessary to insure adherence. Furthermore, affirmative action will be taken to attract, utilize, and serve minorities, the handicapped, and other persons to insure full participation in the opportunities afforded by the University. Insofar as possible, the University will make reasonable accommodations to enable the handicapped to undertake work or study for which they qualify.

The University is also committed to the principle prescribed in Title IX of the Education Amendments of 1972, which specifically prohibits discrimination on the basis of sex in educational programs or activities which receive Federal funds.

Any student, employee or applicant for admission or employment who believes that he/she has not been dealt with by this University in accordance with the principles and requirements stated above may address the Office of Affirmative Action, George Mason University, and then state the facts that occasioned the complaint, present any relevant documents or correspondence, and request assistance in resolution of the matter.

George Mason University
June 1977
The Graduate School

The Graduate Catalog is published annually by the Office of Publications, George Mason University, 4400 University Drive, Fairfax, Virginia 22030. Designed and illustrated by Robert Hickey, edited by Joy Willett.
Correspondence Directory

For Questions About:

Admissions, Applications and General Information
Graduate School Admissions Office
(703) 323-2104

General Graduate School Information
Dean of the Graduate School
(703) 323-2123

Degree Program, Advising and Assistantships
Chairman, Department of Interest
(See Telephone Directory in this catalog)

Summer Session
Dean, Summer Session
(703) 323-2300

Financial Aid
Office of Financial Aid
(703) 323-2176

Veterans Affairs
Office of Veterans Affairs
(703) 323-2381

Housing
Coordinator of Student Housing
(703) 323-2354

Visitors are always welcome at the University, and prospective students are especially encouraged to visit the campus, preferably while the University is in session. Administrative offices are open Monday through Friday, but since hours vary, it is best to make appointments in advance.
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Academic Calendar
1977-78

Monday, August 22 through
Wednesday, August 24 . . . . Welcoming days, and orientation
programs for new undergraduate
students and new faculty, and
Proficiency and Placement Examinations
Biol 124-125 Examination for
Nurses
English Composition
Mathematics Proficiency Test
Music Competency Placement Tests

Thursday, August 25 through
Tuesday, August 30 . . . . Registration (for times and priori-
ties see calendar in Schedule of
Classes)

Thursday, September 1 . . . . First day of classes
Saturday, September 3 through
Monday, September 5 . . . . Labor Day recess
Thursday, September 8 . . . . Last day for adding new courses
(undergraduate – day sections)
Wednesday, September 14 . . . Last day for adding new courses
(evening and graduate sections)
Friday, September 23 . . . . Last day for filing winter degree
applications (Masters’) in Office
of the Registrar
Friday, October 14 . . . . Patriots’ Day – special class sched-
ule
Friday, October 21 . . . . Last day for filing spring degree
applications (Bachelors’) in Office
of the Registrar

Wednesday, November 2 . . . . Last day for dropping a course
without incurring a grade of “F”

Tuesday, November 15 . . . . Last day for dropping Graduate
School admissions applications for
second semester

Thursday, November 17 . . . . Last day for undergraduate stu-
dents not enrolled in first semes-
ter to notify Admissions Office
for reenrollment second semester.
Spring Semester Schedule of
Classes and registration calendar
published

Thursday, November 24 through
Sunday, November 27 . . . . Thanksgiving recess
Monday, November 28 through
Friday, December 2 . . . . . Last registration (for times and priori-
ties see calendar in Schedule of
Classes)

Thursday, December 1 . . . . Last recommended date for filing
undergraduate admission applica-
tions for second semester

Friday, December 2 . . . . . Winter Masters’ theses due in Office
of Graduate Dean

Monday, December 12 . . . . Last day of classes
Tuesday, December 13 (to 4:00
p.m.) . . . . . . . . . . . . . . . . . . Study day
Tuesday, December 13 (4:00
p.m.) through Wednesday,
December 21 . . . . . . . Examinations
Thursday, December 15 . . . . Foreign Languages Placement
Testing (for Undergraduates)
Saturday, January 14, 1978 . . Winter Commencement

First Semester 1977

Wednesday, June 15 . . . . . Last day for filing Graduate
School Admissions Applications
for first semester, Fall, 1977-78

Thursday, June 16 through
Friday, June 24 . . . . Welcoming Days for Undergradu-
ate Students. Early registration
for certain newly admitted stu-
dents (by invitation only)

Monday, June 27 . . . . Last day for undergraduate stu-
dents not in continuous registra-
tion (Summer Session excluded)
to notify Admissions Office for
reenrollment first semester.

Friday, July 1 . . . . . . . . . . Last recommended date for filing
undergraduate admission applica-
tions for first semester

Friday, July 15 . . . . Foreign Languages Placement
Testing

Friday, August 12 . . . . Tuition and fees due for early-
registered students

Second Semester 1978

Friday, January 6 . . . . . . Tuition and fees due for early-
registered students

Friday, January 13 . . . . . Placement and Proficiency Test-
ing (undergraduate):
Biol 124-125 Examination for
Nurses
Mathematics Proficiency Test
Music Competency Placement
Tests
Monday, April 17 ............ Fall semester Schedule of Classes and registration calendar published

Monday, April 24 through
Friday, April 28 ............ Early registration (for times and priorities, see calendar in Schedule of Classes)

Friday, April 28 ............ Last day for filing summer degree applications (Masters') in Office of the Registrar
Spring Masters' theses due in Office of the Graduate Dean.

Monday, May 1 ............ Recommended filing date for financial aid applications for 1978-79 session

Friday, May 5 ............ Last day of classes
Saturday, May 6 through
Monday, May 8 (to 4:00 p.m.) Study days

Second Semester 1977-78

Monday, May 8 (4:00 p.m.) through Tuesday, May 16 Examinations
Saturday, May 20 ............ Spring Commencement
Thursday, June 15 ............ Last day for filing Graduate School admission applications for Fall 1978

Summer Session 1978

Summer Session consists of several terms, ranging in length from five to eight weeks, during the period May 29-August 6. Classes are offered during both day and evening hours. For details, consult the Summer Session Catalog, which is available in February.

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History of the University

George Mason University is the outgrowth of an extension center for higher education established in Northern Virginia in 1948 by the University of Virginia. In 1956 the Board of Visitors of the University of Virginia authorized the establishment of a co-educational two-year branch college to supplement extension offerings in Northern Virginia. This branch opened in September, 1957, in temporary quarters at Bailey's Crossroads. It had 17 students and was called the University College.

The City of Fairfax purchased 150 acres for a permanent branch campus and donated it to the University of Virginia in 1959. Early the following year, the branch was named for the Virginia statesman, George Mason, and was given the status of a community college.

In March, 1966, the General Assembly authorized the expansion of George Mason into a four-year degree-granting institution and gave it the long-range mandate to expand into a university of major proportions. The first senior class received degrees in June, 1968. Graduate programs began in September, 1970, and the first graduate degrees were conferred in June, 1971.

In an attempt to meet the state's long-range mandate, the George Mason College Board of Control, supported by the citizens of Alexandria, Falls Church, Arlington and Fairfax County, worked to acquire 422 additional acres. In January, 1972, the George Mason College Foundation, Inc. acquired the former Fairfax High School on Route 50 in Fairfax City and this facility is now known as the North Campus. By the end of 1972 the University's Main Campus had reached its current size of 576 acres.

Having established and fostered the institution through its first fifteen years of growth, the Rector and Visitors of the University of Virginia recommended to the Governor of the Commonwealth of Virginia that George Mason College be separated from its parent institution in February, 1972. The enabling legislation was passed by the General Assembly, signed by the Governor, and on March 1, 1972, the former branch of the University of Virginia became an independent institution under the name of George Mason University.

Mission and Goals of George Mason University

The statute creating this institution, and its location in the most rapidly growing, densely populated suburban area of Virginia, together impose on this University a mission capable of providing leadership in identifying and meeting the higher education needs of all who reside in Northern Virginia. George Mason University accepts the responsibility for carrying on a persisting and aggressive search for ways of serving the educational, research and community service needs of Northern Virginia, the development of its faculty and facilities to meet these needs and those of the State and of the nation to which it can contribute, and the articulation of its capabilities with those of other institutions of higher education in Virginia.

To accomplish this mission, George Mason University will strive to achieve the following goals:

**Goal 1.** George Mason University will seek out and meet the evolving needs of the citizens of Northern Virginia for higher education, research and knowledge-based services. The criteria by which the needs of its constituencies will be assessed will include needs manifested by students enrolling in this and other institutions of higher learning, the advances in education technology as their
worthiness is proven, the career opportunities offered by employers in this and other regions and the needs for moral and cultural development.

This University in framing its offerings will adapt its programs flexibly and imaginatively to cope with the evolution of each of the criteria listed. It will take advantage of its unique laboratory-like setting in a modern suburban area, richly endowed with both industrial and residential facilities and with historic significance, and adjacent to Washington, D.C., a center of national and international activities. Since its resources and capacities will necessarily be limited, it will, in formulating its offerings, continually seek evidence of the substantiality of the needs voiced by students or groups within the surrounding region and the educational feasibility of serving these needs.

Goal 2. George Mason University is committed to develop in those men and women who enroll in its programs those qualities which will make of them cultured, thoughtful and informed men and women. This University accepts the obligation of helping individuals to equip themselves for successful careers in business, in public services, in the arts, or in the professions. In addition it will aspire to develop in each of its students moral and cultural values, minds capable of disciplined reasoning and rigorous decision making, and the innate desire to achieve excellence in leadership in whatever field of endeavor the individual pursues.

To these ends George Mason University will incorporate in all degree programs it offers a substantial core from the arts and sciences designed to develop the ability of each of its graduates to reason effectively, to express himself or herself clearly, and to identify those values for which he or she stands.

Goal 3. George Mason University will endeavor to serve those individuals who will be pursuing programs leading to baccalaureate, graduate and professional degrees and also those individuals who seek to further their previous education but have neither a need for, nor the desire to attain a degree.

To these ends this University will offer (a) carefully designed baccalaureate and graduate programs, articulated with the programs and courses offered by other institutions of higher education in this region, (b) an array of courses especially tailored to enable individuals to continue their educations and thus to grow occupationally, and (c) encouragement to individuals to pursue life-long learning in order to fulfill themselves as citizens, as parents and as self-sustaining individuals.

Goal 4. George Mason University will develop, as its student body and its faculty grow in numbers, internal communities that will associate faculty members and students who share common intellectual interests, that will encourage interchange among students and faculty members, and that will overcome the impact of "bigness" by providing focus for association among students. It will achieve this objective by maintaining a complex of separate but inter-related colleges limited in size, each with a distinctive educational task. The educational tasks of these colleges will be to provide programs of demonstrable excellence in (a) the liberal arts, (b) professional fields, (c) graduate study and (d) continuing education.

Goal 5. George Mason University will enhance the accessibility of this University to capable students regardless of race, creed, age, sex, income or geographical location within Northern Virginia. It will do this by expanding its ability to provide financial aid; by continually re-evaluating its admission criteria; by modifications in its own curricula and teaching processes; and by devising methods that make its services conveniently available to all who might benefit from them throughout the Northern Virginia region.

Goal 6. George Mason University will continually strive to develop an academic, social and physical environment that will enable not only the younger student but also the more mature student to broaden his or her perception of self and to formulate new goals. The University recognizes the special need to reach effectively those students who are associated with the University only a few hours each week, and will seek to provide through its academic programs and its student services a responsive environment that will stimulate the development of each student.

Goal 7. The University will attract, support and periodically review the performance of a faculty of men and women of diverse races and creeds from the liberal and applied arts, the sciences, and professional studies who demonstrate excellence in teaching. This faculty will be encouraged and aided in its efforts (a) to further develop competency in identified fields of specialization, (b) to extend the frontiers of research, and (c) to enhance faculty services. By its excellence and effort, the faculty will forward the University's educational leadership role in the region and be a vital and integral part of the intellectual development and growth of Northern Virginia.

Goal 8. George Mason University will encourage research as an integral part of the learning process by both students and faculty. The University is committed to the idea that learning must comprehend active inquiry, the satisfaction of intellectual curiosity, and the persisting scholarship that broadens and deepens understanding and that for some participants leads to the discovery of new knowledge.

Goal 9. George Mason University acknowledges its role of assisting in the development and improvement of the cultural and intellectual life of the community, particularly Northern Virginia. The University has a significant opportunity to serve in ways that go beyond formal educational programs and community-benefiting research; therefore, the University will encourage its faculty members and students continually to enhance their capabilities in light of community needs and actively to translate those capabilities into community service. Programs which advance this goal will be actively sought for the mutual growth and benefit of George Mason University and Northern Virginia in the years ahead.

Goal 10. George Mason University will continue to plan its physical plant expansion and continually improve its organization, administrative services and procedures to insure for the future a harmonious and pleasant environment, and to enhance the excellence of all its activities. In order to achieve this goal the University will seek both human and financial resources that will cause it to be a dynamic force for improvement of higher education in Northern Virginia, and an example of moral and educational leadership.

(Approved by the Board of Visitors January 8, 1975)

The University

George Mason University, the State University in Northern Virginia, offers a wide range of undergraduate and graduate degree programs at two Fairfax campus locations; courses are also taught at more than 25 off-campus sites in the region.

The University's Main Campus is located just south of the City of Fairfax at Route 123 and University Drive. The North Campus is situated on U.S. Routes 50, 29 and 211, within the City. Both campuses are 16 miles from downtown Washington, D.C.

Since 1964, when the first four academic buildings opened on the Main Campus, expansion has been rapid. Today, the University serves more than 9,300 day and evening students through the College of Arts and Sciences, the College of Professional Studies, the School of Business Administration, and the Graduate School. A Summer Session provides courses for almost 5,000 students.

George Mason University serves a diverse, metropolitan student body. Five hundred students live in apartments on the Main Campus; all others commute to the two Fairfax campuses from the greater Washington, D.C. area. Half the students are employed and attend the University on a part-time basis; ten percent are veterans using financial provisions of the GI Bill. Of the almost even numbers of men and women, one-third are married; the average student is twenty-five years old. About 40% of the students major in arts and sciences programs, 25% in business, and 13% in nursing. The remainder enroll in programs and courses such as education, fine and performing arts, or public administration.

In the development of George Mason's 576-acre Main Campus, careful attention has been paid to the preservation of the natural beauty of the area. Parking is located on the perimeter of the campus, with buildings surrounded by groves of trees and park-like recreational areas.
Several new buildings have recently been completed, including Clarence Robinson Hall, an addition to the Student Union, and a five-story tower addition to the Charles Rogers Fenwick Library. Clarence Robinson Hall houses a number of academic departments. The library addition is the first of six such modules scheduled to be built at intervals. The fully completed Student Union, a physical education building, a biology greenhouse, and several modern classroom buildings are situated on the Main Campus.

The School of Business Administration and the Department of Fine and Performing Arts are temporarily located on the University's 16-acre North Campus. The North Campus facility provides special art, music, dance, and theater areas, including studio and rehearsal rooms and an 800-seat auditorium. A specialized library serves students in disciplines housed there; a cafeteria is also available. A scheduled shuttle-bus operates between the two campuses.

Planning is currently completed for the construction of the second phase of Clarence Robinson Hall. The University has resubmitted requests for design monies for a second tower addition to the library, for a second phase of the physical education building, and for a permanent administration building. Working drawings for a new academic building, Academic III (to house all of psychology, geology, and the research components of biology and physics) are completed, and the University is awaiting construction funds for this facility.

Nine new three-story apartments on the Main Campus are occupied by students this year for the first time. Five hundred students share two, four, and six person units which provide full living accommodations. In addition to on-campus housing, the Office of the Student Housing Coordinator can assist students in finding suitable housing in the vicinity.

University library services are provided on both Fairfax campuses. An open stack arrangement encourages direct access to the collections which number 145,600 volumes and 193,309 microform units. Approximately 2,150 current periodical titles are received. The library is a selective depository for United States Government publications. Services available to students and faculty at both campus locations include interlibrary loans.

The Research Center for the Federal Theatre Project contains the major collection of playscripts, radio scripts, set and costume designs, and other creative materials produced by the Federal Theatre of the 1930's. Based on more than 40,000 items placed on deposit at George Mason by the Library of Congress in 1974, the collection also includes gifts from private individuals and a growing oral history library. The Center is housed in the Fenwick Library and administered in conjunction with the Department of English. Approved students in various disciplines make use of its resources.

Students studying at the University have the research and cultural resources of Metropolitan Washington at their disposal. The many specialized libraries and collections of the National Archives, the Library of Congress, and the Smithsonian Institution are easily accessible.

Counseling, testing, financial aid, job placement, career planning, and health insurance are among the many services available to students.

Campus clubs, student publications, student government, and intramural and intercollegiate athletics offer students a variety of activities in which to participate.

**Consortium Membership**

George Mason University is the host institution of the Consortium for Continuing Higher Education in Northern Virginia. In addition to George Mason University the other members are Northern Virginia Community College, University of Virginia, Virginia Polytechnic Institute and State University and affiliate member, Marymount College of Virginia. The Consortium's primary goal is to foster inter-institutional cooperation while broadening the base of learning opportunities for adult students. Specific information is available in the Guide to Higher Education Courses for Adults in Northern Virginia, distributed three times yearly by the Office of the Consortium Administrator, 4210 Roberts Road, Fairfax, Va. 22030.

**Undergraduate Academic Programs**

Information regarding the academic programs of the University at the undergraduate level can be found in a separate Undergraduate Catalog which may be obtained from the Office of Admissions.

The College of Arts and Sciences, the College of Professional Studies, and the School of Business Administration provide courses and degree programs leading to the Bachelor of Arts degree with majors in 22 areas; the Bachelor of Science degree with majors in 13 areas; the Bachelor of Science in Education degree with majors in 3 specialties; and the Bachelor of Music degree. In addition, the Office of Extended Studies administers the Bachelor of Individualized Study program.

The Office of Extended Studies coordinates the evening courses and undergraduate programs of the College of Arts and Sciences, the College of Professional Studies, and the School of Business Administration. A number of bachelor's degree programs are completely available in the evening.

**Extended Studies**

The Office of Extended Studies performs a number of functions generally associated with continuing and adult education. Special academic programs offered through the Office of Extended Studies originate in the appropriate college or school of the University, and hence are subject to official University regulations and procedures.

The Office of Extended Studies administers a program of regular undergraduate and graduate credit courses of the colleges and schools of the University at convenient off-campus locations throughout Northern Virginia. Off-campus credit courses are fully applicable to the residence and degree requirements of the University. Off-campus class schedules are included in the University's regular schedule of classes and a separate off-campus schedule of classes each semester.

Extended Studies also administers the Senior Citizens Higher Education Act of 1974 as applicable to the University.

**Public Service and Non-Credit Offerings**

Non-credit courses, workshops, institutes and programs offered by the University are coordinated or administered through the Office of Extended Studies. The University's
on-going series of non-credit educational activities serve a variety of community and public service needs. Each semester a series of short courses which may be taken for personal enrichment, professional advancement, or recreation is offered to the public at a modest cost. Course offerings, schedules, and fees are available in the non-credit brochure published semi-annually.

Other public service offerings include conferences, workshops, and institutes of a more specialized nature offered at the request of governmental, industrial, business, and professional groups to meet in-service training needs.

The University will award Continuing Education Units (CEU) to students who have successfully completed any non-credit activity for which CEU are designated.

The Graduate School

History

Graduate study was initiated at George Mason in 1970, when the College was still a part of the University of Virginia, with the introduction of master's programs in Biology, Mathematics, and Elementary Education. In 1971 additional master's programs were introduced in Secondary Education, School Administration, School Supervision, and History. In 1972, shortly after George Mason University became an independent state institution to serve the needs of Northern Virginia, the Graduate School came into formal existence and the first Dean of the Graduate School was appointed. Graduate work was extended at that time to include new master's programs in Business Administration, Guidance and Counseling, and Psychology. Master's programs in Economics, English, and Reading were added in 1973. These have since been joined by master's programs in Spanish, Special Education, and Public Administration. Other new programs are now being planned.

Organization

The Graduate Faculty, operating under Bylaws adopted in 1975, is the body in which the governance of the academic policies and procedures of the Graduate School is vested. The Graduate Faculty approves all graduate programs, authorizes all graduate degrees conferred by the University, and sets minimum standards for admission to and graduation from graduate programs.

The Graduate Council is the executive body of the Graduate Faculty. It consists of one graduate faculty member from each department offering graduate work, three at-large members elected from the graduate faculty, as well as the Dean and Assistant Dean of the Graduate School. It meets approximately nine times a year to conduct its regular business. Special meetings may also be called as the need arises.

The Graduate Council has four standing committees: the Graduate Academic Policies and Procedures Committee, the Graduate Curricula Committee, the Graduate Student Appeals Committee, and the Graduate Publications Committee.

Enrollment

In the fall of 1976, there were 1074 admitted graduate students enrolled at George Mason University. There were also close to 1,000 post-baccalaureate students taking courses through Extended Studies.

There were 253 master's degrees conferred in the 1976 calendar year.

Diversity is the key word in describing the George Mason University community. Local students of all ages and backgrounds as well as students from fifty-one countries share the academic opportunities afforded by the only state university in Northern Virginia.
Student Affairs

Student Activities
At George Mason University, learning is not confined to the classroom. In addition to extensive academic offerings, George Mason students find a variety of activities which allow full expression of their talents and interests.

The University encourages student participation in shaping the character and quality of the institution; it believes that cooperation of students through participation in University life is essential to the development of academic, administrative, and cultural standards beneficial to the University community as a whole.

A student is ineligible to hold elective or appointive office in any organization or activity associated with the University if his cumulative grade point average is less than 2.000. Moreover, any student on probation is ineligible to participate in any athletic or other activity representing the University on either an intercollegiate or club level and/or to serve as a working staff member of any student organization. It is the responsibility of the individual student to notify his organization when he becomes ineligible. The student's academic dean, however, has the authority to remove the restriction on activities, in whole or part.

Student Organizations.
Student publications, student government, intercollegiate and intramural athletics, and numerous campus clubs provide opportunities for students to exercise the full scope of their talents. There are approximately 60 student organizations on campus spanning a broad range of interests: political, forensic, dramatic, musical, journalistic, scientific, recreational, business, social, religious, and fellowship. Participation in student activities is limited to bonafide registered students.

All clubs and organizations are encouraged to become members of the Student Government Club Council. Membership in the Council provides opportunities to interact with other groups, file and storage space for equipment and materials, involvement in the planning and development of activities on campus, and a channel of communication with the University administration regarding student activities on campus.

Student Union
Most non-academic activities and programs at the University take place in the Student Union: the offices of Student Government, Vice President for Student Affairs, Associate Dean for Student Life, Associate Dean for Student Services, Coordinator of Student Union, as well as those of Career Planning and Placement, Financial Aid, Counseling, Testing, Veterans Affairs, student publications, student organizations, Campus Ministry and the Honor Committee.

The Union houses recreational facilities such as an arts and crafts center, game, TV, music, and card rooms and lounge areas.

On the second floor of the Student Union, banking, bookstore, and dry cleaning services are available. United Virginia Bank (Telephone 938-2900), Compass Dry Cleaning (Telephone 323-1115), provide their services for the convenience of all students, faculty, and staff.

Food services, supplied by Ogden Food, are available on both campuses including the new rathskeller facilities.
in the Student Union. For the convenience of the campus community, vending machines are located in various buildings on each campus. For information concerning catering service, contact the Food Service Manager of the Main Campus. Telephone 323-1120.

The snack bar, cafeteria, and rathskeller are on the Union lower level, with patios on both the north and south sides of the building. The Union also has a variety of facilities to accommodate meetings which can be reserved through the Coordinator of the Union’s office. Telephone 323-2164.

On the North Campus, student lounges and meeting rooms are open and available during the normal class schedule. A study lounge is located in Room 107 and a student organization room is on the second floor, Room 207. Organizations or individuals wishing to schedule this room should sign up on the calendar provided at the entrance to Room 207.

All students wishing to schedule meeting rooms or conferences throughout the University must do so in Room 310 of the Student Union. All Student Union reservations by all University groups are made in Room 310 of the Student Union also. Telephone 323-2164. Most facilities may be reserved free of charge to University groups with some exceptions for support costs for special events. Please keep in mind that many services (including audio, visual, general equipment, furniture needs, parking considerations, food service and banking) are available to you in the Student Union and be sure to take the time to discuss these services with the Union staff.

Health Services

The Student Health Service, with offices on both Main and North Campuses, offers treatment of minor illness, administers first aid, dispenses non-prescription medications, provides referral services to outside health resources, offers hygienic information and counseling, and assists in administration of a program of health and accident insurance for students.

During the academic year, programs are offered with emphasis on the “preventative” aspects of health. Last year’s programs stressed areas such as blood pressure, Pap testing, and weight control as related to behavior modification.

Pregnancy testing and throat cultures are performed for a minimal fee. Abortion counseling and referrals are also offered.

Staffing consists of a Nurse/Coordinator, two part-time nurses, and a consulting physician.

Main Campus: Student Union, Room 355. 8:30 a.m. – 9:00 p.m. Weekdays 323-2584
North Campus: Room 105, 9:00 a.m. – 1:00 p.m. Weekdays 323-2589

Health Insurance

All George Mason University students are eligible, on a voluntary basis, to enroll in the University-endorsed Accident & Sickness Insurance Plan, underwritten by the North American Assurance Society of Virginia, Inc. The policy includes provisions for major medical coverage, outpatient laboratory fees, and x-ray coverage, as well as the usual provisions for hospital room and board, surgical expenses, etc. At minimal cost to the student, this policy provides for coverage of the person insured twelve months per year, 24 hours per day, world-wide, at the University or elsewhere. Health insurance brochures, enrollment applications, and claim forms may be obtained at both North Campus and Main Campus health offices.

Housing

The University offers on-campus housing for 496 students. The residential complex is composed of nine three story structures containing 122 apartments. The 122 apartments are divided into one, two, or three bedroom units which accommodate two, four, or six students respectively. Each apartment unit has its own entrance from the outside, and includes a kitchen, bathroom, and carpeted living room in addition to the bedroom(s). Utilities, with the exception of telephone, are included in the rent. Complete information concerning the University’s on-campus housing is available from the Coordinator of Student Housing, George Mason University, 4400 University Drive, Fairfax, Virginia 22030. Telephone 323-2354/55. For assistance in obtaining off-campus housing, students should contact the office of the Student Housing Coordinator. Telephone 323-2354/55.

Counseling Center

George Mason University’s Counseling Center provides specialized services for student development including counseling for personal adjustment, social skills and communication enhancement, marriage and couples counseling, educational and career counseling, and psychological testing for understanding how one functions as a person. Individual counseling and group workshops for personal growth and development are also available. Minority students may wish to contact the Center’s Counselor for Minority Students. The Center offers its services on a strictly confidential basis and at no charge to George Mason students.

Testing

The Counseling Center also serves as the University testing center where students may take the College Level Examination tests (CLEP), and obtain applications for the Graduate Record Examination (GRE), Law School Admission Test (LSAT), Graduate Management Admission Test (GMAT), Medical College Admission Test (MCAT), Dental Admission Test (DAT), Veterinary Aptitude Test (VAT), and the Miller Analogies Test (MAT). The Counseling Center also conducts Foreign Language Placement tests.

Career Planning and Placement

The Office of Career Planning and Placement, located in Room 365 of the Student Union, provides a number of programs and services to assist graduate students in obtaining full-time and part-time employment and career information. Major services offered to students include:

1. Employer Recruitment Program: Throughout the year employers conduct interviews on campus for career positions with organizations in business, economics and education. Students are encouraged to register for these opportunities.
2. Job Referral Programs: Graduate students and alumni can register to receive appropriate full-time job notices received by the University. Part-time and summer job
boards are also maintained outside Room 365 of the Student Union.

3. Permanent Credential File: These files contain references that are made available to prospective employers and graduate schools at the request of the student. Graduate students seeking employment in the education and social service field are strongly encouraged to establish Credential Files.

4. Career Counseling: Short-term individual or group career counseling assistance is available for identifying career options, employer research, resume writing, and interviewing skills. Counselors are available on an individual basis to critique resumes.

5. Career Reference Library: A specialized self-help library containing job hunting directories and guides, government employment information, graduate and professional school catalogs, and occupational information, is open from 8:30 to 5:00 Monday through Friday and one evening per week.

All programs and services are available to alumni on a continuing basis. In its employment assistance program, George Mason University is in full compliance with all federal and state laws governing Equal Opportunity and Affirmative Action.

Veterans Affairs

The University maintains an Office of Veterans Affairs in the Student Union, Room 352, to assist veterans, service personnel, dependents and survivors in obtaining authorized veterans educational benefits. The office also provides support to veterans in adjusting to University life.

A Veterans Coordinator and a Veterans Administration Representative are available to offer assistance to veteran students. Training time equivalent information is posted on the bulletin board of the Office of Veterans Affairs in the Student Union Building, third floor.

All courses taken by a graduate student are expected to be applicable toward a graduate degree. If a veteran takes any courses numbered below 500 during a semester, the training times may be adjusted accordingly.

Veterans should contact the office as soon as possible before they plan to enroll for a semester or summer session. The number of hours to be carried in a particular semester or summer session are carefully monitored by the office and periodic reports are filed with the Veterans Administration with regard to the veteran student’s academic progress.

Chapters 34 and 35 of P.L. 94-502 have increased the amount of entitlement from 36 to 45 months for graduate students entitled to veterans educational benefits.

Athletic Activities

The intercollegiate program at George Mason University offers competition between GMU and colleges in Virginia and other states on the East Coast. Men’s intercollegiate competition includes cross-country, track and field, soccer, basketball, wrestling, volleyball, fencing, baseball, golf and tennis.

The GMU men’s program is a member of two national athletic organizations — the National Collegiate Athletic Association (NCAA) and the National Association of Intercollegiate Athletics (NAIA). The Patriots also participate in the Mason-Dixon Intercollegiate Athletic Conference (MDIAC) with additional outside competition furnished by American University, the University of Virginia, George Washington University, Howard University, Georgetown University and Catholic University.

The women’s intercollegiate athletic program, under the direction of the school’s first Coordinator of Women’s Athletics, Christine Shelton Walters, is a new and rapidly growing part of the total athletic program. Competitive sports for women are conducted in tennis, volleyball, basketball and fencing while coeducational competition is provided in cross-country and track and field. Future plans tentatively include field hockey, softball, swimming, crew and gymnastics.

GMU is affiliated with the Association of Intercollegiate Athletics for Women and the Virginia Federation of Intercollegiate Sports for Women and participate in the small college conferences against schools in Virginia, Maryland and the District of Columbia.

The 1976 women’s volleyball team was small college champion in Virginia and represented the state in Southern Region II championship in Kentucky.

The men’s program, under the guidance of Athletic Director Raymond H. Spuhler, was ranked 19th nationally (NAIA) for overall athletic excellence during 1975-76. The baseball, basketball, tennis, cross-country, golf and volleyball teams participated in national and regional post-season tournaments to help establish the finest record of athletic achievement in the school’s history.

A growing intramural program enables men and women to participate in a variety of athletic activities of their choice.

Campus Ministry

The Campus Ministry Association is an ecumenical group of chaplains of Judaic-Christian orientation concerned with being of service to the George Mason University community. Campus Ministry provides opportunities for counseling, religious, educational, and social activities, and for community service and social action, including working for the alleviation of the hungry and starving peoples worldwide. The organization is sponsored by Catholic, Jewish, and Protestant efforts.

Chaplains are on campus daily for discussion and assistance of any kind for all members of the University community. The Campus Ministry office is located in the Student Union.

Reserving University Facilities

Individuals or groups of students and organizations wishing to utilize University facilities for non-academic events must complete a reservation form in Room 310 of the Student Union prior to the assignment of space. Approval is then given subject to the procedures outlined in the George Mason University Administrative Procedures Manual, which states that responsibility for determining availability of space is delegated to the following offices: 1) Student Union facilities and cafeterias (Main and North Campus)—Coordinator of the Student Union; 2) Lecture Hall, North Campus Auditorium, and classrooms—University Registrar; 3) Physical Education/Athletic facilities—Coordinator of Athletic Facilities; 4) Outdoor spaces other than Physical Education/Athletic facilities—Director of Facilities Planning.
All reservations should be submitted at least two weeks prior to the date of the event. Earlier notification is recommended, however. For additional information regarding the scheduling of activities, call 323-2164.

Student Regulations
Conduct
Academic institutions exist for the transmission of knowledge, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students should be encouraged to develop the capacity for critical judgement and to engage in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable factors of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on campus, and in the larger community. Students should exercise their freedom with responsibility.

The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the academic community. The University has a duty to develop policies and procedures which provide and safeguard this freedom.

The George Mason University believes that the procedures, rights, and safeguards outlined below are indispensable to achieving the goals desired—freedom to teach, to learn, and to search for truth.

The University respects and is determined to protect the individual dignity, integrity, and reputation of its students. At the same time it requires that students comply with those conventions and regulations of University life which it feels are necessary to maintain order, to protect individuals and property, and to fulfill its purposes and responsibilities as a University. To this end the University realizes that the prevailing rule in matters of student discipline must continue to be that of common sense, and an excessive legalism can only disserve the University and its community of students, faculty, and staff.

A student enrolling in the University assumes an obligation to conduct himself in a manner compatible with the University’s function as an educational institution. To fulfill its functions of imparting and gaining knowledge, the Code of Virginia (Section 23-9:2) confers upon the University the responsibility for maintaining order within the University and the right to exclude those who are disruptive of the educational process.

The office of the Associate Dean for Student Life is administratively responsible for maintaining a system of non-academic discipline. Questions regarding student conduct should be directed to this office.

Non-University Publications
George Mason University students may publish and/or disseminate publications on campus which are not funded by the Publications Board, if they are not in violation of state or local ordinances. Students should exercise this option responsibly. The University assumes no responsibility for the contents of the material published and/or disseminated. Distribution of publications on campus does not signify that the University necessarily approves or supports the contents of the publications.

William S. Willis has served as Dean of the Graduate School for five years. He also enjoys his rapport with students in his capacity as Professor of French as he leads a seminar in the arts and culture of late nineteenth-century France.
Motor Vehicles

The privilege of operating and parking a motor driven vehicle at George Mason University is extended to all students, subject to the following procedures:

Vehicles must be registered with the Department of Security. At time of registration the student must certify that:

1. the vehicle has a valid state registration and valid insurance from a recognized insurance company evidencing coverage for public liability in conformance with the laws of the Commonwealth of Virginia;
2. the student has a valid state driver's license; and
3. the student understands that he or she will be governed by University Motor Vehicle and Traffic Rules and Regulations, a copy of which will be furnished at time of registration of vehicle.

A fee of $1.00 will be charged for the first vehicle registered by the student. After the initial vehicle registration, the student may register two additional (family) vehicles without charge. Every registered vehicle shall display in full view the University's vehicular registration decal, which shall be affixed immediately upon issuance to the left half of the rear bumper. The decal is valid for the period September 1-August 31 of the specified year.

Firearms

The unauthorized possession, storage, display, or use of any kind of ammunition, firearms, fireworks, explosives, air rifles, air pistols or other lethal instruments is prohibited on University property. Any questions regarding this regulation should be directed to the Department of Security.

Solicitors and Salesmen

Solicitors and salesmen, except on official business with the University, are not permitted on the campus without permission of the Business Office.

Pets

No pets will be permitted in University buildings at any time. Additionally, pets which are on campus grounds will be on a leash and under supervision at all times.

Honor System

Until 1972 George Mason University was part of the University of Virginia. As such, the Honor System takes its beginnings back to 1842. As originally formulated in 1842, the Honor System at the University applied only to final written examinations. Through its more than a century of continuous use, the pledge has been extended to all academic work submitted for credit, statements made to the faculty, and other declarations of good faith or intent. Considered reprehensible under the system are lying, cheating, plagiarism, and stealing.

George Mason University established its Honor System on May 14, 1962. It is recognized and approved as an integral part of the University. The essence of the code is that a student's word can be accepted in academic matters without question as truth and that any violation of a student's word is an offense against the Honor Code.

All students and faculty in the University have the duty as participating community members to report to a member of the Honor Committee any alleged violations of the Honor Code. This duty is of importance not only because it enforces the Honor Code, but also because it gives each student the opportunity to express respect for personal integrity and an honest academic community.

The Honor Code is administered by the Honor Committee which is independent of the Student Government and the University's administration. The Honor Committee is a group of students elected from the student body whose primary and indispensable duty is to instill the concepts and spirit of the Honor Code within the student body. The secondary function of this group is to sit as a hearing committee on all alleged violations of the code.

At the beginning of each semester each faculty member has the responsibility to delineate to all his classes his own, as well as departmental, policy pertaining to the Honor Code. In addition, each department has a designated liaison to the Honor Committee who is available to answer most questions which may arise. A statement of willingness to conform to and uphold the Honor System is included in the application form for admission to the University.

The Honor Committee may be reached at 323-2195 during the posted hours or at the office, Room 306, Student Union.

The Charles Rogers Fenwick Library at George Mason University's Main Campus, a second home for graduate students, provides reference and research materials, as well as a comfortable and quiet atmosphere for study.
Honor Code

2. Extent of the Honor Code

The Honor Code of the George Mason University shall deal specifically with:

- Cheating and attempted cheating
- Plagiarism
- Lying
- Stealing

Cheating encompasses the following:

The willful giving or receiving of an unauthorized, unfair, dishonest, or unscrupulous advantage in academic work over other students.

The above may be accomplished by any means whatsoever, including but not limited to, the following: fraud, duress, deception, theft, trick, talking, signs, gestures, copying from another student, and the unauthorized use of study aids, memoranda, books, data or other information.

Plagiarism encompasses the following:

Presenting, as one's own the words, the work, or the opinions of someone else without proper acknowledgment.

The borrowing of the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment.

Lying encompasses the following:

The willful and knowledgeable telling of an untruth or falsehood as well as any form of deceit, attempted deception, or fraud in an oral or written statement relating to academic work.

Stealing encompasses the following:

The taking or appropriating without the right or permission to do so, and with the intent to keep or to make use of wrongfully, property belonging to any member of the George Mason University community or any property located on the University campus.

3. Responsibility of the Faculty

In order to alleviate misunderstanding, each professor is required to delineate at the beginning of each semester what constitutes a violation of the Honor Code in his class. This should include an explanation of:

a. the extent of group participation that is permissible in preparing term papers, laboratory exhibits or notebooks, reports of any kind, tests, quizzes, examinations, homework, or any other work
b. the extent to which the use of study aids, memoranda, books, data or other information is authorized during recitations, tests, quizzes, examinations, reports of any kind, laboratory sessions, or any other work, and
c. the nature of plagiarism.

Any faculty member who witnesses an Honor Code violation should proceed as outlined under Procedures for Reporting a Violation.

4. Responsibility of the Students

Students should request a delineation of policy from each professor if none is given at the beginning of each semester. Students should also request an explanation of any part of the delineation that they do not understand. It is the responsibility of the student to understand his professor's policies with regard to the Honor Code. It is also the responsibility of the student to understand the provisions of the Honor Code.

All students in the University have the duty as participating members of this community to report to a member of the Honor Committee any violations of the Honor Code. This duty is of importance not only because it enforces the Honor Code, but also because it gives each student the opportunity to express his respect for personal integrity and an honest academic community.

5. Procedure for Reporting a Violation

Any student or faculty member witnessing a violation of the Honor Code shall enlist, wherever and whenever possible, one or more corroborating witnesses to the overt act. The accuser(s) [student or faculty], will inform the suspected party of the accusation in writing and inform him that he has forty-eight hours in which to contact a member of the Honor Committee and request a hearing or to withdraw from school. After these forty-eight hours,
if he has not withdrawn or requested a hearing, the accuser(s) shall submit a written accusation to the Honor Committee.

6. Counsel for the Accused and Accuser

Counsel for the accused and accuser may be provided by any member of the George Mason University academic community, including members of the Honor Committee.

7. Appearance of Witnesses

The Honor Committee may request any member of the University community to appear as a witness before the Committee at the time of the hearing. All requests shall be issued by the Chairman of the Honor Committee.

8. Verdict

In order to find a student guilty of an honor violation, all of the voting members must vote for a verdict of “guilty.” If the vote is not unanimous, the defendant shall be acquitted.

A student may not be tried more than once for the same offense except when an appeal is granted.

9. Penalty

If the accused is found guilty of an honor violation, the Honor Committee shall determine the nature of the penalty by majority vote.

The Honor Committee is not restricted to any one kind of penalty but will determine a penalty commensurate with the seriousness of the offense. Typical of the range of penalties which may be given are:

Oral Reprimand:
An oral statement to the student by the Chairman of the Honor Committee. No entry is made on the student’s scholastic record.

Written Reprimand:
A written censure which is placed in the confidential files of the Honor Committee, but is not made part of the student’s scholastic record.

Non-Academic Probation:
Exclusion from holding an elected or appointed office in any student activity or organization. A student on non-academic probation will be ineligible to participate in any athletic or other activity representing the University and will be ineligible to serve as a working staff member of any student organization. This action is noted in the Dean of Students’ file but is not made a part of his scholastic record.

Failing Grade:
Recommendation in writing to the instructor of a grade of “F” for the work involved or for the entire course is made. The student’s permanent record will reflect the academic evaluation made by the instructor.

Suspension from the University for One or More Semesters:
A student’s scholastic record would read: “Non-academic suspension from

(date to date).”

This penalty will be given only in extraordinary circumstances, such as for repeated offenses.

10. Appeal

An appeal for a new hearing may be made based on the assertion that new evidence is available (the Appeal Board will consist of at least three voting members). If a new hearing is granted, no voting member from the original hearing may vote in the second or subsequent hearings of the same case.

11. Keeping of Records

In the event that the accused is found “not guilty,” the Chairman of the Honor Committee will destroy all records of the hearing.

If the accused is found guilty, the records of the hearing shall be kept in the file of the Honor Committee. These records shall include a full transcript of the hearing and all evidence presented at the hearing; if this evidence belongs to any person other than the defendant, the original shall be returned to the owner and a copy shall be kept with the records of the Honor Committee.

12. Composition of the Committee

The Honor Committee shall consist of the following members:

- two graduate students
- five seniors
- four juniors
- three sophomores
- three freshmen
- the faculty adviser(s), although the latter shall be a non-voting member.

One or more clerks will be appointed by the Committee from the student body who will serve as aides to the Chairman.

The Chairman of the Committee will be elected by majority vote of the Committee members. For a particular hearing, five members of the Honor Committee will be designated as voting members.

The Faculty Adviser, as a non-voting member of the Committee, should sit with and advise the Committee at all hearings. The Faculty Adviser shall be chosen by the Honor Committee.

Previous Honor Committee members may serve during the summer term.

13. Eligibility of Members

Any student who maintains a 2.0 grade-point average and is in good standing with the University shall be eligible for the Honor Committee. A Committee member must maintain a 2.0 average to continue in office.

14. Election of the Honor Committee

In the spring semester, five juniors, four sophomores, three freshmen and two graduate students shall be elected. The term of office shall begin upon election and run until the following spring elections.

In the fall semester an election shall be held to fill any vacancies that have occurred and to elect three freshmen to serve until the following spring elections.

If a vacancy occurs between elections, it may be filled by a majority vote of the remaining members.

15. The Challenging of and Voluntary Withdrawal of a Member of the Committee from Participation in a Particular Hearing

Any accused who challenges the right of any member of the Honor Committee to sit in judgment on him must present cause to the Chairman.

The Committee shall then decide the validity of the challenge with the challenged member abstaining from voting. A simple majority shall decide the validity of any challenge. A successfully challenged Committee member shall not be present during the hearing.

A member of the Honor Committee shall withdraw from a specific hearing if he feels that he is prejudiced as to the facts in the case.

16. Provision for Amendments

Upon petition of 20% of the student body, a committee shall be appointed by the Student Government to consider amendments to, or revisions of the Honor Code, said amendments and/or revisions to be then voted on by the student body as a whole. A two-thirds majority of the votes cast shall be necessary for acceptance of any amendment or revision.

It is further provided that every third year the Student Government shall appoint a committee to review the Honor Code in an effort to keep it currently applicable. Any changes deemed necessary shall be implemented in the manner described in the above paragraph.

The Honor Committee may also propose amendments to be voted on by the student body as described in paragraph one of this section.

Approved amendments will take effect immediately except that new provisions will not be applied to cases initiated prior to amendment.
Admissions

Fields of Study
The Graduate School of George Mason University offers a wide variety of degree programs and courses at the master's level. At present, there are no programs or course offerings at the doctoral level. Nearly all graduate courses are offered in late afternoon and early evening hours.

Degree programs at the master's level are offered in the following fields: Biology, Business Administration, Economics, Elementary Education, English, Guidance and Counseling, History, Mathematics, Psychology, Public Administration, Reading, School Administration, School Supervision, Secondary Education, Spanish, and Special Education.

In addition to the degree programs listed above, a number of departments which do not have graduate degree programs offer graduate-level courses for elective credit and personal or professional enrichment. Graduate (500-level) courses, but no graduate programs are offered in: American Studies, Astronomy, Chemistry, French, Geology, Health, Nursing, Physical Education, and Physics. Undergraduate courses approved for graduate credit are also offered by a number of departments.

Admission Requirements
An applicant for admission to the Graduate School must have earned a baccalaureate degree from an accredited institution of higher education. In general, an applicant must have earned a grade-point average of 2.75 (on a 4.0 scale) in the last two years of undergraduate work, or have exceptional compensatory qualifications. The applicant's undergraduate program should include completion of the prerequisites for graduate study in his or her chosen field. If the applicant has completed some graduate work elsewhere, the quality of this work may also be taken into consideration.

Some departments require letters of recommendation. Scores on a nationally standardized examination, such as the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT), are also required by some departments. Applicants should consult the instructions accompanying application forms for further details concerning departmental requirements. In addition to meeting the general entrance requirements, an applicant must also meet the entrance requirements listed in this catalog under a specific departmental program.

Admission Categories
Applicants to the Graduate School may be offered admission as degree, provisional or non-degree students. A graduate student registered in another graduate school may be given permission to register on a temporary basis as a guest matriculant.

A degree student is one who has met all University and departmental entrance requirements and is pursuing a master's degree at George Mason University on a full-time or a part-time basis.

A provisional student is one who has submitted all required documentation for degree status and has been granted temporary admission because he or she does not meet all of the minimum academic requirements for degree status, but has supplied sufficient evidence of capacity to undertake graduate work.
Provisional status may be assigned for a variety of reasons, including borderline grade-point average, low test scores, or low undergraduate grades in the prospective graduate discipline. After completing not less than six nor more than 12 hours of graduate work with a "B" average (3.0 grade-point average) or higher, the student may apply for degree status. The provisional student's enrollment normally will be terminated if, after completion of 12 hours, a "B" average has not been achieved.

Graduate credits earned as a provisional student may be applied toward a master's degree with the approval of the department concerned and the Graduate Dean. Provisional status is offered on the recommendation of the department concerned, with approval of the Graduate Dean.

A non-degree student is one who has been admitted to the Graduate School but does not wish to pursue a degree or has not supplied all required documents for degree status. Although its primary mission is to conduct programs of instruction leading to graduate degrees, the Graduate School welcomes qualified students who have no immediate degree objectives, to the extent that available resources allow. An applicant requesting non-degree status must submit a transcript showing that a baccalaureate degree has been earned at an accredited college or university. Non-degree students are not eligible to hold appointments as graduate assistants. All other services, including parking and library privileges, are the same as those accorded to other graduate students.

Although admission to non-degree status is not intended to be used as a preparatory program for later admission to a degree program, a non-degree student who later wishes to pursue a graduate degree may supply all admission credentials to the Graduate School Admissions Office and request to be changed to degree status. A student cannot be assured that all courses taken as a non-degree student will be credited toward a degree. With approval, a student may apply a maximum of 12 hours of graduate credit earned in non-degree status to a master's degree.

A guest matriculant is a visiting student from another institution who has been offered temporary admission, usually for one semester, as a non-degree student at George Mason University. A guest matriculant must have been officially admitted as a graduate student at another recognized university and certified by his or her dean as being in good standing. An application form for requesting guest matriculant status may be obtained from the Graduate School Admissions Office.

Application for Admission

Application Procedures

Initial correspondence concerning application for admission to the Graduate School should be addressed to the Graduate School Admissions Office, 4400 University Drive, Fairfax, Virginia 22030. Telephone (703) 323-2104. Applicants seeking admission as degree students to the Graduate School must submit the following:

1. Application form.
2. Transcripts (two official copies) from each institution attended, including George Mason University (Undergraduate or Extended Studies enrollment).
3. $10.00 application fee (non-refundable).
4. Residency information form (if Virginia residence is claimed for tuition purposes).
5. Records of examinations (GRE, GMAT, etc.) as required by certain departments (see application instructions).
6. Letters of recommendation as required by certain departments. (See Departmental Entrance Requirements.)
7. Supplementary Application Form for Foreign Students (non-U.S. citizens only).
8. Other forms and documents as may be required by individual departments (see application instructions).

It is the responsibility of each applicant to make sure that all documents are received for inclusion in his or her admission file. The University cannot assume any obligation to inform the applicant about missing documents or credentials. All documents and credentials submitted in support of applications for admission become the property of George Mason University, and will not be returned or duplicated for any purpose.

Application Deadlines

Applications and all supporting documents for the admission category sought must be received by the Graduate School Admissions Office no later than June 15 for the fall semester; November 15 for the spring semester; March 15 for the summer session.

Submission of Transcripts

Two official copies of transcripts from each college or university attended must be received in support of an application for admission as a degree student. Applicants should instruct their institution(s) to send their transcripts directly to the Graduate School Admissions Office and not to departments. George Mason students and graduates (including Extended Studies enrollees) who apply for admission to the Graduate School should request the University Registrar to send transcripts directly to the Graduate School Admissions Office.

After admission, graduate students at George Mason University who are given permission to take courses elsewhere for possible transfer credit must have transcripts of this work, upon its completion, sent to the Graduate School Admissions Office.

Graduate Record Examination (GRE)

Although a number of graduate programs do not require the GRE, almost all will use such test scores as an additional measurement of an applicant's qualifications. The GRE may be taken in either or both of two forms: 1) the Aptitude Test and 2) the Advanced Test. Some departments require scores for both the Aptitude and the Advanced Tests. During 1977-78 the Graduate Record Examination will be administered locally and nationally on the following dates:

June 11, 1977
October 15, 1977
December 10, 1977
*January 14, 1978
**February 25, 1978
April 22, 1978
June 10, 1978

*not administered at George Mason University on that date
**Aptitude Test only
The Counseling Center of George Mason University administers the Graduate Record Examination. Information concerning the examination, and test applications, may be obtained from the Counseling Center in the Student Union, 4400 University Drive, Fairfax, Virginia 22030. Telephone (703) 323-2165. Applicants may also write directly to Graduate Record Examinations, Educational Testing Service, Box 955, Princeton, New Jersey 08540. A local telephone number for ETS is (202) 296-5930.

The application deadline is generally one month prior to the test date. It is usually possible to “walk-in” to take the examination, but there is an additional fee involved. Only checks or money orders will be accepted in payment.

Graduate Management Admissions Test (GMAT)

This test, formerly known as the ATGSB, is required of all applicants seeking a degree in Business Administration. During 1977-78 the Graduate Management Admissions Test will be administered locally and nationally on the following dates:

- July 9, 1977
- November 5, 1977
- January 28, 1978
- March 18, 1978
- July 8, 1978

The Counseling Center of George Mason University administers the Graduate Management Admissions Test. (See information above concerning the Counseling Center and the Educational Testing Service. Use Box 966 if writing to ETS.)

Walk-in registrants will be admitted on a “first-come” basis according to space available. They must bring with them registration forms and checks or money orders to pay the fees in full. Cash will not be accepted.

Admission of International Students

George Mason University currently limits its acceptance of international students to those who are already in the United States. There are limited residential facilities on the campus, and no funds available from which to award fellowships to non-immigrant students. Foreign students who intend to study at George Mason University on student visas are expected to meet all requirements for admission as degree students and are required to be full-time students. They should also, when applying for admission, supply a current transcript from the institution from which they are transferring.

Foreign training, as shown by official documents, may be accepted as equivalent to the bachelor’s degree, but each case must be approved by the appropriate department chairman and the Graduate Dean. In addition to satisfying academic requirements, as stated above, applicants whose native language is not English must demonstrate their proficiency in the English language by taking the “Test of English as Foreign Language” (TOEFL). Results of this test should be submitted as part of the application for admission. Applications for admission will not be processed until the Graduate School Admissions Office has received the TOEFL results. Students who have received a bachelor’s degree or advanced degrees from an accredited university or college in the United States, Australia, Canada, Great Britain, or New Zealand are automatically exempt from this requirement.

The above photographs portray aspects of the Child/Youth Study Center’s summer program involving tutoring and testing of youths in grades 2 through 12 by Education graduate students in the Reading Practicum. Although its primary function is to provide faculty-supervised training for George Mason students, the Center also offers a service to the Northern Virginia community.
New Zealand are automatically exempt from this require-
ment.
The TOEFL is administered four times each year in the
United States and many foreign countries. Further informa-
tion may be obtained from the University's Counseling
Center or from Educational Testing Service, Princeton,
New Jersey 08540.
Since the admission of foreign students must conform to
the regulations of the United States Immigration and
Naturalization Service, it is necessary for such students to
complete carefully the "Supplementary Application Form
for Foreign Students," obtainable from the Graduate
School Admissions Office, and submit it with the appli-
cation for admission.

Offer of Admission
A written offer of admission is made by the Dean of the
Graduate School to an applicant who meets all admis-
sion requirements and has been recommended for admis-
sion by the appropriate department. The offer specifies
the effective date of admission (which will normally coin-
cide with the semester requested in the application), the
category of admission being offered, and the name of the
faculty adviser assigned to the applicant.
An individual whose offer of admission has lapsed must
submit a new application and fee, if he or she wishes to
be reconsidered for admission at a later date.

Reactivation of Deferred Applications
A student who has been notified that action on his or
her application has been deferred, pending the completion
of prerequisite courses for graduate study in a chosen field,
is encouraged to notify in writing the Graduate School
Admissions Office as soon as the prerequisites have been
met. It is the responsibility of the applicant to furnish tran-
scripts confirming that the prerequisite courses have been
satisfactorily completed. No admission decision can be
made until these grades are received.

Faculty Adviser
At the time of admittance to graduate study, the student
is assigned a faculty adviser by the department responsible
for his or her program of study. Prior to initial registra-
tion, an appointment should be made with the faculty adviser
to discuss and develop a program of study. The student
should also consult with his or her adviser for course ap-
proval before registration each semester.

Termination of Admission
A student may be admitted to only one graduate program
at any one time. Application for and acceptance of an offer
of admission in a second graduate program automatically
terminates the student's admission to the first program.
The student's admission also terminates when time limits
have been exceeded or when other conditions for the con-
tinuation of admission have not been met.

Readmission
A student whose study at the University is interrupted
for any reason for a period of two semesters or more (ex-
clusive of summer sessions) must apply for readmission.
Readmission forms are available through the Graduate
School Admissions Office. Since the department chairman
and the Dean of the Graduate School must approve all
readmissions, students are encouraged to complete the
forms and return them to the Graduate School Admissions
Office no later than one month prior to the anticipated
date of registration. A $10 non-refundable fee must accom-
pany the readmission form. If such readmission is approved,
the student is subject to the academic regulations and re-
quirements in effect at the time of registration after read-
mission.

Change from Provisional or Non-Degree to
Degree Status
In order for a change from provisional or non-degree
status to be considered, a student must submit a written
request for change of status. Forms for this purpose are
available in each department. It is the responsibility of the
student to supply an up-to-date George Mason University
transcript in support of his or her request. Appropriate
documentation, such as transcripts, letters of recommenda-
tion, or test scores needed to support the request for
change of status must be submitted to the Graduate School
Admissions Office.

Approval of Credits Upon Change of
Student Status
Credits earned in the provisional or non-degree status
may be used subsequently in meeting degree requirements
if recommended by the faculty adviser and department
chairman, and approved by the Dean of the Graduate
School. However, a maximum of 12 graduate credits earned
in non-degree status may be applied toward a master's
degree. Students admitted in these categories are there-
fore strongly urged to obtain faculty guidance before
beginning coursework. Credits cannot be applied toward a
master's degree unless they are specifically approved for
that purpose.

Transfer of Credit
With the approval of the appropriate department, a stu-
dent may transfer up to six semester hours of graduate
credit earned at other accredited institutions prior to his
or her acceptance and enrollment in the George Mason Uni-
versity Graduate School. Undergraduate courses taken at
other institutions are not transferable for credit to graduate
programs within George Mason University. All graduate
work offered as transfer credit must be applicable to the
degree program the student is pursuing at George Mason
University.
Credit is normally considered for transfer, upon the re-
quest of the student, at the time of initial registration as a
degree student. The student will receive written confirma-
tion from the Dean of the Graduate School of all credits
approved for transfer.

After enrollment as a degree student and with the prior
approval of his or her department chairman and the Gradu-
ate Dean, a student may, when need exists, earn up to six
additional hours of transfer credit for graduate courses
taken at other institutions. Forms for requesting permis-
sion to take courses elsewhere are available in the Graduate
Dean's office. Permission is not ordinarily given for a stu-
dent to take a course elsewhere for transfer credit during
the semester in which the degree is to be awarded.
In all cases of courses accepted for transfer of credit,
including those taken within the Consortium for Con-
Continuing Higher Education in Northern Virginia, a minimum grade of "B" must have been earned, and the courses involved must be applicable towards a comparable degree at the institution offering the course. Extension and in-service courses which are not intended by the institution offering the courses to be part of a degree program will not be acceptable for transfer to George Mason University. It is the student's responsibility to furnish evidence that any courses presented for transfer of credit would be applicable to a comparable degree at the institution where earned. If this information is not on the official transcript, it must be obtained in writing from the appropriate Dean at that institution.

The decision as to the acceptability of work taken elsewhere and presented for transfer credit to a graduate program at George Mason University is the responsibility of the appropriate department, subject to the approval of the Graduate Dean.

**Change in Field of Study**

**Change of Program from One Department to Another**

Admission to graduate study is contingent upon approval by the department in which the student proposes to concentrate. Therefore, a student is not free to change major departments at will. If a student wishes to change from one department to another in a new field of study, he or she must submit a new application and fee for admission. Letters of recommendation, GRE or GMAT scores, and other documents, if required for admission by the prospective department, must be submitted to the Graduate School Admissions Office. Previous acceptance by one department does not guarantee acceptance by another department. The new (prospective) department will review the student's application for a change of program along with new applications for the semester in question.

A student may be admitted to only one graduate program at any one time. Application for and acceptance of an offer of admission in a second graduate program automatically terminates the student's admission to the first program.

**Change of Program within the Same Department**

A student desiring to change from one graduate program to another in the same department should submit a Student Request Form to the chairman of the department. After reviewing the request and documentation, the department chairman will submit his recommendation to the Dean of the Graduate School for approval.

**Extended Studies Enrollment**

Administered by the Office of Extended Studies, this program allows persons who may not meet regular graduate admissions criteria, or for whom these criteria are not appropriate, to request enrollment in courses for which they are qualified without seeking admission to the University. Credits earned by students as Extended Studies enrollees are recorded on regular transcripts.

Professional counseling is available by appointment in the Office of Extended Studies. Prospective enrollees must bring records of all previous academic work with them for counseling purposes.

Post-baccalaureate students wishing to take course work may seek to register for certain graduate courses through the recently created independent School of Business Administration maintains a computer laboratory at its North Campus location. Students have the opportunity to gain practical first-hand experience useful in their studies at George Mason and in preparation for careers in the business world.
Extended Studies, without applying to the Graduate School, provided they have the necessary background and have completed the specific prerequisites for the courses chosen.

All on- and off-campus tuition, fees, and University regulations apply to Extended Studies enrollees. To qualify for this type of enrollment, a student must be approved for each course enrollment by a professional counselor in the Office of Extended Studies, who will counsel and advise the student about prerequisites and course requirements. Many academic policies are administered by an admitted student’s academic dean. The Director of Extended Studies administers such policies for Extended Studies enrollees.

If a student who has enrolled in courses using this procedure wishes to apply for admission, the regular graduate admission procedures should be followed. Extended Studies enrollees may apply for regular admission at any time.

A maximum of twelve hours of graduate credit earned through Extended Studies may be applied toward a master’s degree program with approval of the Graduate Dean if the student applies for admission to the Graduate School and is accepted in a degree program.

More information on Extended Studies enrollment may be obtained from the Office of Extended Studies. Telephone: 323-2436.

Senior Citizen Enrollment

The Office of Extended Studies administers the Senior Citizens Higher Education Act of 1974 as applicable to the University. Under the terms of this act, eligible Virginia residents over 60 years of age with a taxable income of less than $5,000.00 are entitled to enroll in University courses on a space available basis without paying tuition and fees. The act also provides for audit and non-credit course enrollment without payment of tuition and fees, and without income limitation. Interested senior citizens should contact the Office of Extended Studies.

Summer Session

The Summer Session at George Mason University continues each year to increase educational opportunities for students in Northern Virginia. The offering of summer courses is controlled, however, by a funding pattern more restrictive than that for the regular academic semester.

Applicants wishing to begin graduate work in summer must complete a Graduate School application before submitting a summer session enrollment form. There is a $10.00 non-refundable charge for each form.

Students who wish to complete graduation requirements for summer commencement should understand that the University does not necessarily offer all required courses in any particular summer session.

Information concerning the GMU Summer Session is presented in a separate catalog which is available each year about March 1. Inquiries about the Summer Session may be directed to the Dean of the Summer Session, (703) 323-2300, or the Summer Session Enrollment Desk in the Office of the Registrar, 323-2520.
Payment of Tuition and Fees

Changes in Tuition and Fees

Tuition and fees as shown are those in effect at the time this catalog was printed. George Mason University maintains the right to change its schedule of tuition and fees if and when authorized.

Financial Obligations

Any person who is undertaking any form of academic study with George Mason University, including supervised research, must be registered as a student and pay the prescribed charges.

A student has not completed his or her registration for classes until satisfactory financial arrangements have been made with the Business Office (Cashier) including payment of all outstanding financial obligations.

Tuition and fees will normally be paid at the time of registration. However, those continuing students who participate in early registration will be billed. Tuition and fees for these students are due and payable at the Business Office (Cashier) on or before August 12, 1977 and January 6, 1978.

Eligibility for In-State Tuition

To be eligible for reduced tuition charges, a person must have been domiciled in Virginia for a period of at least one year prior to registration for the semester for which a reduced charge is sought. A person becomes domiciled in Virginia when he is legally capable of establishing a domicile and is present in Virginia with the unqualified intention of remaining in the state permanently.

Domicile, however, is primarily a question of intent and the burden of proof of domicile is on the student seeking the benefit of reduced tuition. Students who wish additional detailed information on domicile should contact the Graduate School Admissions Office.

Deferred Payment Plan

A deferred payment plan is available for students whose tuition and fees for the semester exceeds $200.00. The student must pay at least $200.00 as the initial payment, with the remaining tuition and fees payable in two equal installments. Students using the deferred plan must come to the Cashier's Office to make the initial payment and to sign the deferred payment contract. Bills for installment payments will not be prepared. It is the student's responsibility to ensure payment of his installments on or before the due dates published. Contracts will not be mailed to students.

Failure to make a tuition payment on or before the due date results in a late charge of $5.00 per day, for a maximum of three days. Students who have not made payment within three days following the due date will be placed on financial probation for a period of 10 calendar days. If satisfactory arrangements have not been completed by the end of the probationary period, the student will be placed on financial suspension without further notice.

Due Dates

First Semester: Second and third payments due October 7 and November 11, 1977.

Tuition and Fees Schedule

<table>
<thead>
<tr>
<th>In-State Students</th>
<th>Out-of-State Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee (a)</td>
<td>$10.00</td>
</tr>
<tr>
<td>Summer Session Enrollment Fee (b)</td>
<td>10.00</td>
</tr>
<tr>
<td>Tuition, Full Time, per hour</td>
<td>32.00</td>
</tr>
<tr>
<td>Tuition, Part time, per hour</td>
<td>32.00</td>
</tr>
<tr>
<td>Delayed-Registration Fee, per day (c)</td>
<td>5.00</td>
</tr>
<tr>
<td>Graduation Fee (d)</td>
<td>15.00</td>
</tr>
<tr>
<td>Special Registration Fee (e)</td>
<td>15.00</td>
</tr>
<tr>
<td>Private Instruction (f)</td>
<td>105.00</td>
</tr>
<tr>
<td>Transcript Fee (g)</td>
<td>2.00</td>
</tr>
</tbody>
</table>

(a) See Application Procedures, page 18
(b) See Summer Session, page 22
(c) See Delayed Registration, page 26
(d) See Application for Degree, page 31
(e) See Special Registration Fee, page 24
(f) Music: 14 half-hour lessons. See Undergraduate Catalog for refund and payment information.
(g) See Transcript Fee, page 24

How to Figure Your Semester Tuition Costs

<table>
<thead>
<tr>
<th>In-State Hours</th>
<th>Per Semester Total Costs</th>
<th>Out-of-State Hours</th>
<th>Per Semester Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 @ $32.00</td>
<td>$96.00</td>
<td>3 @ $62.00</td>
<td>$186.00</td>
</tr>
<tr>
<td>4 @ 32.00</td>
<td>128.00</td>
<td>4 @ 62.00</td>
<td>248.00</td>
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<tr>
<td>5 @ 32.00</td>
<td>160.00</td>
<td>5 @ 62.00</td>
<td>310.00</td>
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<tr>
<td>6 @ 32.00</td>
<td>192.00</td>
<td>6 @ 62.00</td>
<td>372.00</td>
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<td>7 @ 32.00</td>
<td>224.00</td>
<td>7 @ 62.00</td>
<td>434.00</td>
</tr>
<tr>
<td>8 @ 32.00</td>
<td>256.00</td>
<td>8 @ 62.00</td>
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<td>9 @ 32.00</td>
<td>288.00</td>
<td>9 @ 62.00</td>
<td>558.00</td>
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<td>10 @ 32.00</td>
<td>320.00</td>
<td>10 @ 62.00</td>
<td>620.00</td>
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<tr>
<td>11 @ 32.00</td>
<td>352.00</td>
<td>11 @ 62.00</td>
<td>682.00</td>
</tr>
<tr>
<td>12 through 17</td>
<td>384.00</td>
<td>12 through 17</td>
<td>744.00</td>
</tr>
</tbody>
</table>

For each additional hour over 17, add $32.00 for In-State and add $62.00 for Out-of-State.


Payments must be received in the Cashier's Office on or before the due date.

Checks

Checks for tuition, fees, fines or other obligations to the University should be made payable to George Mason University. Second party checks are not acceptable, with the exception of salary pay checks from local business firms payable to the student.

Any check returned to the University by the bank will result in a $5.00 penalty fee for the payer. If payment is not made within five calendar days following notification by the Business Office, the student will be placed on financial suspension without further notice.
Failure to Meet Financial Obligations
Students who fail to meet their financial obligation to the University will be placed on financial suspension. These obligations include tuition and fees, emergency loans, traffic fines, library fines, and all related penalties.

Financial Suspension
Students on financial suspension will have all academic credit withheld. This means that no transcript of record will be issued, no diploma will be released, and no registration for a subsequent semester or term will be permitted. These penalties will be removed upon payment in full of the amounts owed.

Refunds
Tuition, less an administrative charge of $20.00, will be refunded in the event a student cancels registration before the beginning of the semester, or withdraws within the first five (5) working days of the semester. Assessed penalties are non-refundable.

Tuition only will be refunded on a graduated scale for subsequent voluntary withdrawals during the second and third weeks of classes. The refund scale will be posted on bulletin boards and at the Cashier’s Office. It is the student’s responsibility to be familiar with the graduated refund scale.

Off Campus
Students enrolling in off-campus courses are assessed charges at the same rate as those established for on-campus courses. Refer to the Continuing Education Catalog.

Other Required Fees
Transcript Fee
A fee of $2.00 is charged for each transcript of record when requested by the student and $1.00 for each additional copy ordered at the same time. Payment must accompany the request.

Summer Session Fee
A fee of $10.00 must accompany all Summer Session enrollments. The fee is applicable for all terms and is generally not refundable.

Graduation Fee
There is a $15.00 graduation fee which is payable at the time the student submits his or her “Application for Degree” to the Office of the Registrar.

Special Registration Fee
Any student not in attendance at the University who is preparing a thesis under the active supervision of a member of the faculty, or who wishes to return to receive a degree or take an examination, pays a $15.00 registration fee for that semester and is exempt from all other fees.

Motor Vehicle Registration
All students who desire to park their vehicles on University property must register them with the University’s Security Office and pay a fee of $1.00 for a parking decal. (See Regulations on Motor Vehicles).

Credits Earned Elsewhere
A few George Mason University degree programs include academic credits which students may earn at other institu-
tions. Students enrolling for academic credits at other institutions assume all financial responsibility for these arrangements.

George Mason University has a limited amount of financial aid available which is administered by the Office of Financial Aid in Room 353 of the Student Union. The assistance consists of scholarships, grants, loans, and employment. Financial aid awards are based primarily on financial need, with scholarship as a secondary consideration. However, graduate assistantships are available to degree students in all departments and are not necessarily based on need.

New and currently enrolled students should obtain an application for financial aid in early February. In addition, a “Financial Aid Form” in support of the application for financial aid must be filed with the College Scholarship Service.

Students are encouraged to consult with members of the office staff for financial aid counseling and for obtaining further information on all programs available through the Financial Aid Office. The following submission dates are suggested for making student financial aid application:

1977-78 Session .............. May 1, 1977
Summer 1978 ................... April 15, 1978
1978-79 Session .............. May 1, 1978

Applications are considered complete when both the University “Application for Student Financial Aid” and the College Scholarship Service’s “Financial Aid Form” have been received by the Financial Aid Office. Since the processing of the financial statement by the College Scholarship Service takes approximately one month, that form should be mailed directly to CSS by the end of March to ensure timely receipt by the University thereafter. The University “Application for Student Financial Aid” should be mailed directly to George Mason University.

The University participates in federal and state supported programs of student financial aid. The following programs are available to eligible students.

**National Direct Student Loan**

These are low-interest long-term loans available to qualified students according to their demonstrated financial need. Repayment begins nine months after completion of the graduate program. Amounts up to $2,500 a year are available for graduate students. These funds are usually reserved for full-time students, although exceptions may be made under extraordinary circumstances.

**Federal Nursing Loan Program**

This program is very similar to the National Direct Student Loan Program. The maximum Nursing Student Loan available to an individual borrower in an academic year, or its equivalent may not exceed $2,500, or the amount of the student’s financial need. Cancellation of the loan is permitted under certain conditions. Federal Nursing Scholarships are available to nursing students who show exceptional financial need.

**College Work-Study Program**

Qualified students with demonstrated financial need may obtain on- or off-campus part-time employment related to their field of study, and earn up to the total amount of their award, at the prevailing hourly wage rate.

**Virginia Graduate Scholarships**

The University grants scholarships to graduate students in amounts of up to $500 per academic year. Awards are based on achievement and demonstrated financial need.

**Virginia Loans**

The University provides loans for qualified students with demonstrated financial need. Eligibility requirements and repayment terms are similar to those of the National Direct Student Loan.

**In-Service Training Program for Teachers**

A candidate for a graduate degree may establish eligibility to receive state funds for graduate study closely related to his field of work through one of the State’s Division Superintendents of Schools. The candidate may use the funds to enroll at the University in previously approved courses.

**Guaranteed Student Loan Program**

The State Education Assistance Authority, through participation agreements with lending institutions of the State, enables those institutions to make long-term personal loans to students to help pay their college and vocational school expenses. These loans are guaranteed to the extent of 90 percent of their principal by the Authority. Applications are made directly to the lending agency, usually a bank or savings and loan organization. To be eligible, a student must enroll or have been accepted for full-time enrollment. The interest rate is 7 percent. In cases of limited income, the federal government will pay the interest until the repayment period begins. Repayment of the loan begins nine months after completion of the student’s academic program. Loans may not exceed $2,500 per year or a total of $10,000 for graduate work.

**Emergency Loan Programs**

Short-term, interest-free loans are available to students for emergency situations. Applications for these loans are made through the Financial Aid Office.

Other sources of financial assistance available to graduate students, but not administered by the Financial Aid Office include:

**Fulbright-Hays Awards**

Funds for pre-doctoral study or research abroad are available through this program. Candidates are nominated by a committee of the faculty. Further information concerning this program is available from the George Mason University Fulbright Program adviser.

**Graduate Assistantships**

Application should be made directly to the academic department involved. There are teaching and graduate assistantships available to degree students in all departments offering graduate programs. Stipends vary from $3,400 to $3,900.

**Other**

Additional forms of aid are available to graduate students from a variety of sources. Extensive information about these specific programs is available in the Career Library located in the Office of Career Planning and Placement, Room 365 of the Student Union.
Registration

Academic Advising
Registration for newly admitted graduate students, as well as continuing students, begins with a visit to the student's academic adviser in the department to which the student has been admitted. There the student can obtain information about specific courses and degree requirements and will develop, in consultation with a graduate faculty adviser, an individual program of study. Progress in an approved program of study is a shared responsibility of the student and his or her adviser. The student is responsible for compliance with the rules and procedures of the Graduate School, and all applicable departmental requirements which govern the individual program of study.

Schedule of Classes
In developing a program of study with his or her adviser, the student will need to consult the Schedule of Classes, published well in advance of each registration period by the Registrar's Office. It provides information about the times and locations classes will be offered, the names of course instructors, final examination schedule, and procedures for paying tuition and fees, dropping or adding a course, or making other changes in registration. Schedules of Classes will be mailed only to newly admitted graduate students. Continuing students will find schedules in their departments, at the information desk in the Student Union, at the information desk in Finley Building, as well as at the Registrar's Office in the East Building.

Course Approval Forms
The Schedule of Classes also contains the Course Approval Form to be used at the time of registration. For each registration the student, in consultation with his or her adviser, prepares a schedule of courses appropriate to departmental requirements and individual needs. This schedule is then entered on the Course Approval Form, which must be signed by the faculty adviser prior to each registration.

Registering
The Schedule of Classes contains detailed instructions for registering. At each registration, the student must complete and sign the Information Card. Information requested on this card is used to establish the student's master record and serves as the basis for numerous statistical reports. George Mason University does not discriminate with regard to race, color, sex, religion, or national origin; the information requested is for reports the University provides to federal authorities and to other agencies collecting data on equal opportunity for education or employment. The card carries the following statement which must be signed by the student: "I voluntarily enroll as a student of George Mason University with a serious desire to reap the benefits of its instruction and hereby agree to conform to its rules and regulations, in testimony whereof I subscribe my name." A student failing to complete this card is not a Registered Student.

Delayed Registration
Any student who fails to present himself at the time specified for registration will not be permitted to register unless he can explain his delay to the satisfaction of the Graduate Dean or his representative. If admitted after explanation, the student will be charged a delayed-registra-
tion fee of $5.00 per day for a maximum of three days, part of which may be waived by the Graduate Dean for proper cause.

Student Identity Card
As an integral part of the registration process, each student is issued an identity card. This card serves as the student's official University identification. It must be presented to borrow library materials, and may be required for admission to University events or when using University facilities after normal operating hours. This card is issued for the student's use, is not transferable, and must be validated at registration each semester.

Student Responsibility
The responsibility for being properly registered rests with the student, who should be aware of all regulations and procedures required by his or her program of study. Regulations are not waived nor are exceptions granted because of ignorance of University or departmental regulations.

Change of Address and Other Personal Data
Each student is required to notify the Office of the Registrar of any change of home address, telephone number, change of the name or address of parent or guardian, or change of legal name. When a student's legal name is changed, the Office of the Registrar reserves the right to require a certified copy of documents authorizing the change. Such documents will be kept in the student's permanent file.

Undergraduates Registering for Graduate Courses
An undergraduate student may, with the permission of his or her adviser, the chairman of the department offering the course, the course instructor, and the Dean of the Graduate School, be permitted to register for graduate-level courses (those numbered 500 and above). This privilege will normally be extended only to undergraduate students who have completed a minimum of twelve semester-hours at George Mason University, are in their senior year, have earned a grade-point average of 3.0 or better, have successfully completed all prerequisite courses, and have a major in the department in which the courses are offered. Permission must be obtained in writing prior to registration. Forms for this purpose are available in the Graduate Dean's Office. It is the student's responsibility to obtain all signatures required and to submit a current transcript with the request.

A student may seek to take a graduate course either for undergraduate credit or for reserve graduate credit. Enrollment in a graduate level course for undergraduate credit does not in any way imply subsequent approval for admission into a graduate program, nor may the course be used as credit for a graduate degree at George Mason University. Approval to register for reserve graduate credit (earned credit held in reserve to apply later toward a graduate degree) is normally given only to George Mason seniors who are within 15 hours of completion of undergraduate study. Approval for reserve graduate credit does not imply approval for admission into a graduate program at George Mason University or that credit so earned will be accepted at another graduate school.

One of the excellent research facilities offered by the Department of Psychology is the physiological psychology laboratory. Under the direction of Robert F. Smith, Professor of Psychology and resident physiological psychologist, graduate students who are interested in animal research find the use of the laboratory to be an invaluable tool for testing master's thesis hypotheses.
Credit and Grades

Course Numbering

Graduate courses are those numbered 500 and above. Courses numbered 499 and below are undergraduate courses, some of which, as indicated below, are approved for graduate credit.

Grades and Grade Point Average

A candidate for a master’s degree at George Mason University is required to present a minimum of 30 hours of graduate credit, and meet the requirements as specified for a particular degree by his or her department. A grade point average of 3.0 must be maintained. Grade points (GP) for each semester-hour are assigned on the following scale: A, 4 points; B, 3 points; C, 2 points; D, 1 point; and F, zero points.

If additional courses are taken beyond 30 hours, a “B” average must be maintained for all work taken for graduate credit.

Regulations concerning “Incomplete” marks may be found under Change of Grades.

Completion of Undergraduate Prerequisite Courses

Graduate students are expected to complete all undergraduate prerequisite or preparatory courses before acceptance into a graduate program. Normally, a maximum of one such undergraduate course may be taken as a graduate student, but only during the student’s first semester in the graduate program. All grades for undergraduate courses taken after initial registration as a graduate student will be included in calculating the student’s grade point average for the semester in which the course is taken, as well as for subsequent calculations. However, the credit hours will not be used in the computation of the total hours required for the graduate degree.

Undergraduate – Graduate Courses

A number of departments offer upper-level undergraduate courses which have been approved for graduate credit. Graduate students wishing to use this option must obtain written approval from the department offering the course prior to registration. A maximum of six semester hours earned in such courses may be applied toward a graduate degree. Exceptions to this regulation are noted in departmental descriptions of policy regarding particular programs. Students should consult with their adviser before registering in these courses.

Academic Load

All graduate students are urged to register each semester for only that number of hours which they can successfully complete. The minimum full-time academic load for students is nine hours per semester during the regular academic year. A normal full-time academic load is twelve semester-hours. During the summer, a normal full-time academic load is nine semester-hours for the entire session. Permission of the department chairman is required to exceed the normal load.
Academic Probation and Dismissal

A student who, at the end of any semester, fails to maintain a cumulative “B” average will be placed on academic probation. (A semester is a period during which academic credit and grades are earned and entered into a student’s record.) The student placed on probation must attain a “B” average in grade points within two semesters of work taken at George Mason University or be liable to dismissal from the program. Degree and non-degree students are subject to the same regulations concerning probation and dismissal. A student who falls nine grade points or more below a “B” average at any time after the first semester of study will be subject to dismissal. No graduate credit transferred from another institution will be included in the calculation of the grade point average. Therefore, in determining probation and dismissal, credit earned outside the University will not be counted.

Adding and Dropping Courses

In order to drop or add a course, a student must obtain written permission from the chairman of the department in which the dropped or added course is taught. Forms for this purpose may be obtained from the department. The last day for adding courses shall be no later than 14 calendar days after and including the first day of classes. Students who drop all course work must also file a withdrawal form. All of the required signatures must be obtained on or before the deadlines shown in the Academic Calendar.

The last day to drop a course without incurring an “F” shall be nine calendar weeks after and including the first day of classes.

A student who discontinues a course without proper permission will receive a grade of “F” in that course.

Repeating a Course

A student who has passed a course with a grade of “B” or better is not permitted to repeat the course. A student may repeat a course in which a grade of “C” or below has been earned. Permission for repeating the course must be obtained from the department offering the course. Each department shall establish procedures for granting of permission for repeating a course. In cases where courses are repeated, the following conditions apply:

1. All hours attempted are to count in computation of the student’s cumulative grade point average.
2. A transcript will show both the original and repeat grades and the respective grade points.
3. Only one grade with appropriate grade points may be presented on the degree application.

Auditing a Course

Under certain circumstances a student may be given permission by the appropriate department chairman to audit a course. However, a student may not take for credit a course which has been previously audited. The usual University fees apply to audit status. Additional information regarding audit status may be obtained from the appropriate department chairman.

Class Attendance

Students are expected to attend the class periods of the courses for which they are registered.

Withdrawal from the University

An official withdrawal form must be obtained from the Office of the Registrar and approved in writing by the Graduate Dean or his representative. To clear the student’s record, the application must then be endorsed by the Registrar, the Librarian, the Business Office, and if the student is enrolled in a laboratory course, by the chairman of the appropriate department. When complete, the withdrawal form must be deposited with the Registrar.

When a student withdraws from the University after the last day for dropping a class, each of his instructors is asked to indicate whether the student withdrew passing or withdrew failing. The student’s permanent record is marked accordingly.

Failure to comply with the above regulations will subject the student to suspension from the University.

Enforced Withdrawal

The University may impose enforced withdrawal as a penalty for any fault which prevents the student from fulfilling the purposes of enrollment.

Permission to Take a Course Elsewhere

When a student is already enrolled at George Mason University, permission to take a course elsewhere must be secured from the Graduate Dean prior to registering at the other institution. Forms for this purpose are available from department chairmen. It is the student’s responsibility to request transfer credit for such courses after their completion and to have an official transcript submitted to the Graduate School Admissions Office at George Mason University for evaluation of possible transfer of credit. Permission is not ordinarily given for a student to take a course elsewhere for transfer credit during the semester in which the degree is to be awarded.

Student Requests

All student requests, including those for exceptions to published rules, should be made by petition to the Dean of the Graduate School. These requests should be initiated by the graduate student. They must include the signature and approval of the student’s adviser and the department chairman. Student Request Forms for such purposes are available from departmental offices. It is the responsibility of the student to supply an up-to-date transcript in support of his or her request.

Grade Reports and Examinations

Grade Reports

A grade report is mailed to the student at the end of each semester.

Examinations

Written examinations are held at the end of each semester. No changes may be made in the announced examination schedule unless approved in writing by the chairman of the department in which the course is offered.

In certain graduate courses the assessment of student performance may be more closely related to written and/or oral papers, and because of the more intensive and continuous demands which should be placed upon students,
it would appear appropriate to provide a degree of flexibility in connection with graduate examinations. Therefore, after consultation with his department chairman, the individual faculty member may exercise his judgement regarding the use of a formal examination at the end of the course.

Absence from Examinations and Special Examinations

Absence from examination will not be excused except for sickness on the day of the examination, or for other cause approved by the Graduate Dean. If such absence is unexcused or the examination not taken within ten days, the grade on the course is entered as “F.” A student whose absence from an examination is excused may take a special examination within the ten-day period on a date to be arranged between the student and the instructor in charge of the examination. A request to take an examination late should be made on a Student Request Form.

Change of Grade

Final grades in courses taken for graduate credit may be changed only on the basis of the following two circumstances and procedures.

Change from “Incomplete” to Letter Grade: The mark of “Incomplete” may be given by an instructor to a student who has satisfactorily completed all the requirements of a graduate course except for the completion of assigned papers or reports which the student has been compelled to postpone for reasons beyond his or her control. If the student fails to complete all requirements in time for the instructor to assign a regular grade by the last day of classes of the following semester (not including the Summer Session), the mark of “I” will be changed by the Registrar to the grade of “F”. Both the student and the instructor shall be notified of this change of grade. Incomplete marks in thesis registration are not subject to this time limit. While the mark of “I” remains on the transcript, it is not included in the student’s grade-point average. A student may not register in a course in which he or she has received a mark of “I”.

Change of Final Grade: Once a final grade in a course has been recorded by the Registrar, it can be changed only in cases of computational error, or other justifiable cause approved by the Graduate Dean. (Refer to “Challenge of Grade” procedure below.) All changes of final grades must be initiated, approved, and recorded prior to the last day of classes of the next regular semester (exclusive of the Summer Session).

Challenge of Grade

Although, except in extraordinary circumstances, the individual faculty member must be the best judge of the performance of students in his class, there may be instances in which a student believes a grade has been assigned unfairly. In such cases the student should first ask the professor to reconsider the grade. If the student is not satisfied, he may appeal to the chairman, who should then initiate procedures established by the department. No challenge of grade will be considered after the end of the drop period of the next regular semester (exclusive of the Summer Session).

Degree Requirements

Requirements Applicable to All Master’s Degrees

To qualify for a master’s degree, a candidate must have been accepted as a degree student, be in good standing, and have satisfied all departmental requirements. Specific departmental degree requirements are listed under the respective graduate programs. In general, the candidate must acquire a minimum of 30 semester-hours of graduate credit, and maintain a 3.0 or “B” average in all courses attempted. At least 18 semester-hours of course work must be completed after the candidate has been admitted to the status of a degree student. A comprehensive examination, language requirement, and/or a thesis are also required in some degree programs. Degree candidates are subject to those academic regulations in force at the time of their initial registration following admission. Degree candidates who have been readmitted following voluntary withdrawal for more than one semester are subject to those academic regulations in force at the time of their initial registration following readmission. Degree candidates also have the option of graduating under the academic regulations in force at the time the degree is to be awarded.

Residence

 Normally, at least 24 semester-hours must be completed at George Mason University. Exceptions are noted under Transfer of Credit and under individual degree programs. A completed degree program must include a minimum of 18 semester-hours of course work taken by the candidate at George Mason University as a degree student.

Time Limit

The student must complete all degree requirements for the desired master’s degree within six years from the date of his or her initial registration as a graduate student.

Thesis and Non-Thesis Options

Requirements regarding a thesis vary with the degree program. A number of master’s programs provide for either a thesis or non-thesis option. The quality of the work expected of the student selecting the non-thesis option is identical to that of the thesis option. For further information, consult the section on degree requirements under each degree program.

Thesis

When a thesis proposal has been approved by the appropriate department, the chairman of the department sends to the Dean of the Graduate School a copy of the thesis proposal, including the names of the members of the thesis committee. The student may then enroll in the thesis research course (599) at the beginning of the next academic semester.

The thesis committee is named by the chairman of the candidate’s department, who designates the committee chairman. The committee will be appointed after consultation with the candidate and his or her adviser, and it normally will consist of three persons, one of whom may be chosen initially, or at a later date, from outside the department.

The chairman of the thesis committee is primarily responsible for directing and guiding the candidate’s research and writing activities. It is the responsibility of the student
to keep all members of the committee informed of the scope, plan, and progress of both the research and the thesis.

Any student wishing to elect the thesis option should consult the Guide for Preparing Master’s Theses in this catalog. The student will be permitted to register in Thesis (599) only after a thesis proposal has been submitted, and approved, as prescribed in the Guide.

Copies of the thesis must be deposited with the Graduate Dean on or before the date specified in the academic calendar published in the Graduate Catalog. Any student not in attendance at the University who is preparing a thesis under the active supervision of a member of the faculty, or who wishes to take an examination, pays a $15.00 registration fee for that semester and is exempt from all other fees.

Application for Degree

Students who expect to complete graduation degree requirements must secure an “Application for Degree” from the Office of the Registrar and return it completed to that office by the date designated in the Academic Calendar. There is a $15.00 graduation fee which is payable at the time the student submits his or her “Application for Degree.”

Commencement

Commencement exercises provide an opportunity for students and their families to share in the experience of the conferral of academic degrees. Degree candidates who do not desire to participate in the formal graduation ceremonies must notify the Office of the Registrar at least 24 hours prior to the date and time of the ceremony.

Second Master’s Degree

Course credits already submitted in fulfillment of requirements for a master’s degree may not ordinarily be submitted in fulfillment of degree requirements for a second master’s degree at George Mason University. For exceptional reasons, a maximum of six semester-hours of credit may be allowed, upon the recommendation of the department chairman and with the approval of the Graduate Dean.

Professor of Biology, Michael G. Emsley, one of the many distinguished faculty members at George Mason, is a published author of a popular text about the world of butterflies as seen through the eyes of a collector. The above specimens are just a small sample of student collections housed in the Department of Biology.
Guide for Preparing Master's Thesis

The thesis is expected to demonstrate a candidate's capacity to carry out independent research. The research project is to be closely related to the candidate's general educational objectives, providing an opportunity to contribute creatively to knowledge rather than constituting mere fulfillment of an academic requirement.

The candidate's research topic should be in view as early as possible in his or her graduate career. The candidate should consult with his or her program adviser on the choice of a thesis topic. The choice of topic should take into consideration the candidate's background and interests, ability to handle the problem, accessibility of source materials, and the probable worth of the study. Early formulation of the topic will enable the student to equip himself more effectively with the necessary tools of research such as languages, statistics, and accounting procedures. The student can then plan with the program adviser more purposefully the courses to be included in his or her program which will best prepare the student for the comprehensive examinations related to the major interest. All of these requirements should be embodied in a well-conceived plan of graduate study.

Regulations which are contained in this Guide apply to all theses submitted in fulfillment of requirements for the master's degree at George Mason University.

I. Procedure for Submitting the Thesis Proposal

The candidate should submit six copies of a type-written thesis proposal to the chairman of his or her department of academic study. A model title page for the thesis proposal is shown on page 33. The thesis proposal must include the following items:

a. The candidate's full name.
b. The date of submission of the thesis proposal.
c. The department of academic specialization.
d. The degree sought by the candidate.
e. The tools of research, if required for the degree, together with certification.
f. The tentative title of the thesis (subject to modification in consultation with the thesis committee).
g. The signatures of the members of the thesis committee.
h. The approval of the department chairman.
i. A cogent and concise statement of the major problem of research and supporting problems, not to exceed six double-spaced pages. This statement might well include a selected bibliography pertinent to the subject.

Upon approval of the proposal by the chairman of the department, copies of the proposal will be distributed to the Dean of the Graduate School, the chairman of the department, the chairman and members of the thesis committee, and to the candidate.

Acceptance and approval of the proposal indicates that the topic is considered to be a suitable one; and that the thesis, if developed, will be accepted. The chairman of the department will notify the candidate of the action taken on the proposal.

The student will be permitted to register in Thesis (599) and pursue his research only after a thesis proposal has been submitted and approved as prescribed above.

II. Thesis Committee

The thesis committee is named by the chairman of the candidate's department, who designates the committee chairman. The committee will be appointed after consultation with the candidate and his or her adviser, and normally will consist of three persons, one of whom may be chosen initially, or at a later date, from outside the department.

III. Preparation of Copy of Master's Thesis

The candidate is expected to prepare the text of the thesis in accordance with the usual practices of good English, or of any other language in which it is written. The candidate is also expected to provide copies of the manuscript (either in draft or final form) for all members of his or her thesis committee to examine.

Following acceptance of the thesis by the committee, the candidate will prepare an original and two copies of the final text. The two copies may be either carbon or xeroxed copies. One copy must be deposited with the chairman of the candidate's department. The original manuscript and one copy must be deposited with the Graduate Dean. The Dean forwards the original manuscript and the copy to the University Library for binding and permanent reference.

The following regulations govern preparation of the thesis:

a. The manuscript must be typed on bond paper of either sixteen or twenty pound weight. The paper used must be uniform in weight throughout the thesis. Paper must measure 8½ by 11 inches.
b. The title page must be prepared in correspondence with the sample shown below.
c. Only pica, elite, or bookface type is acceptable. The type face chosen should be used consistently throughout the thesis. A black ribbon must be used to produce a clear, dense copy suitable for microfilming. Clean type is essential to good reproduction of the manuscript. Diagrams and charts must be prepared in india ink. All errors must be corrected in type; ink corrections are unacceptable. Professional appearance is required of the finished manuscript.
d. Unless departments specify otherwise, candidates are advised to consult the current edition of William G. Campbell's, *Form and Style in Thesis Writing* (Houghton, Mifflin Co.) for guidance concerning style.
e. The manuscript must contain a table of contents, a list of references used and, if appropriate, a list of tables, maps, or illustrations.
f. The text must be typed double-spaced, with footnotes single-spaced. Footnotes must appear on the page to which they relate. Margins of the text must be: one and one-half inches on the left, one inch on the right; and approximately one and one-quarter inches at the top and bottom of the page.
g. In footnotes, lists of references or other bibliographic entries, the titles of books, pamphlets, and journals should be underlined (words only - not spaces). Titles of articles or chapters in books should appear in quotation marks.
h. Two copies of an Abstract of the thesis, consisting of no more than one hundred fifty words, must be submitted with the thesis.
i. The title page of the original copy must be signed by the members of the thesis committee and approved by the chairman of the department before it is submitted (together with the original copy) by the candidate to the Dean of the Graduate School for his signature.
j. The original and one copy should be clamped or clipped by a folded stiff cover or spring-back binder, but it must not have holes or staples in any margin since it must be processed for binding.
k. Copyright: It is the candidate's responsibility to obtain written permission of the copyright owners for the use of copyrighted material beyond brief excerpts in the thesis. The candidate must sign an agreement with the University which certifies that permission has been obtained and that the candidate will "save and hold harmless George Mason University from any damages which may arise from copyright violations." This agreement must be filed with the Registrar's Office before the thesis will be accepted.
l. The candidate must decide whether or not to copyright the thesis. Information on copyright protection may be obtained at the reference desk in the Library.

IV. Binding
The original and one copy of each thesis are sent to the University Library where they are processed, bound, and placed in the Library for reference and scholarly research.
The Graduate School of George Mason University offers a wide variety of degree programs and courses at the master's level. Nearly all graduate courses are offered in late afternoon and early evening hours.

Degree programs at the master's level are offered in the following fields:

- Biology (M.S.)
- Business Administration (M.B.A.)
- Economics (M.A.)
- Elementary Education (M.Ed.)
- English (M.A.)
- Guidance and Counseling (M.Ed.)
- History (M.A.) (M.A.T.)
- Mathematics (M.S.)
- Psychology (M.A.)
- Public Administration (M.P.A.)
- Reading (M.Ed.)
- School Administration (M.Ed.)
- School Supervision (M.Ed.)
- Secondary Education (M.Ed.)
- Spanish (M.A.)
- Special Education (M.Ed.)
Master of Science in Biology

The objective of the Biology graduate program is to offer to qualified students advanced knowledge of recent developments in, and applications of, the biological sciences. The program offers a degree in general biology with a variety of courses in cellular biology, organismic biology, and population biology, as well as specializations in Environmental Biology and in Systematic, Evolutionary and Population Biology. The program is designed to serve the needs of:

1. Persons with recent baccalaureate degrees who wish advanced training in biology to qualify for employment at those private and public institutions which hire professional biologists.
2. Persons presently employed, including established teachers and other professionals, who wish to further their careers.
3. Research-oriented persons who expect to qualify for employment on the strength of the Master of Science degree or who hope to proceed to the Doctor of Philosophy degree at another institution.

Through the use of seminars and independent investigation, greater emphasis will be placed upon original thought and familiarization with current literature than in the undergraduate program. Therefore, students enrolled in upper-division undergraduate courses for graduate credit will be expected to cover the work in greater depth than their undergraduate colleagues.

A candidate may gain up to eight hours of credit in relevant approved courses in the Department of Mathematics, or in one of the physical sciences, but only with the permission of the Department Chairman.

Departmental Entrance Requirements.

In addition to fulfilling the general admission requirements, applicants for admission as degree students will be expected:

1. to hold a baccalaureate degree in Biology, or the equivalent, with a grade point average of 3.0 (B) or better in all biology courses taken;
2. to submit scores on the Graduate Record Examination including the Advanced Test in Biology, and
3. to have 3 letters of recommendation submitted.

Applicants who do not meet all of these requirements or who are judged academically deficient may apply for provisional or non-degree status.

Departmental Degree Requirements.

In addition to fulfilling the general degree requirements, the candidate for the Master of Science degree in Biology must:

1. Acquire two or more semester hours of credit in seminar (Biol 591: Current Topics in Biology [1], Biol 592: Seminar in Environmental Biology [1]). For all students, at least one of these credits must be in Biol 591. In the case of students enrolled in the Environmental Biology specialization, at least one of these credits must also be in Biol 592.
2. Complete the required 30 semester-hours of graduate work with not more than two approved undergraduate courses.
3. Satisfy the departmental examiners in a comprehensive examination to be taken at the conclusion of all formal course work.
Specializations

Specialization in Environmental Biology.
A student electing the Environmental Biology specialization must take Biol 540: Environmental Biology I (3), and Biol 541: Environmental Biology II (3), as well as the minimum of two semester hours of credit in seminar as previously described. The balance of the program will then be chosen from one of the following three elective areas:
- Pollution Assessment and Management
- Natural Ecosystem Management
- Environmental Planning
Courses available within each of these elective areas are given in the table below. A double asterisk (**) indicates a required course and a single asterisk (*) indicates an elective course. Up to six semester hours of credit in Biol 593: Independent Study in Biology (1-3) and/or Biol 599: Thesis (3-6) may be submitted for electives in any of the three areas. No more than two courses may be taken from the supporting courses allowed outside of the Department of Biology.

<table>
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<tr>
<th>Elective Areas</th>
<th>Pollution Assessment &amp; Mgmt.</th>
<th>Natural Ecosystem Mgmt.</th>
<th>Environmental Planning</th>
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<td>Undergraduate-Graduate Courses in Biology</td>
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<tr>
<td>Biol 477 Microbial Ecology (4)</td>
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<td><strong>Graduate Courses in Biology</strong></td>
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<td>Biol 512 Experimental Design and Analysis for the Life Sciences (3)</td>
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<td>Biol 531 Food, Energy and Insects (3)</td>
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<td>Biol 545 Freshwater Ecology (4)</td>
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<td>Biol 546 Marine Ecology (4)</td>
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<td>Biol 547 Analysis of Terrestrial Ecosystems (4)</td>
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<td>Biol 548 Population Ecology (3)</td>
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<td>Biol 549 Biological Resource Management (3)</td>
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<td>Biol 565 Environmental Hazards to Human Health (3)</td>
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Not more than two approved undergraduate-graduate courses may be selected from within the following list (see Undergraduate Catalog for details): Biol 342, 344, 413, 415, 441, 447, 448, 464, 465, 480, 482, 483, 484, 485.

Specialization in Systematic, Evolutionary and Population Biology.
A student electing the Systematic, Evolutionary and Population Biology specialization must have previously passed a course in basic evolutionary theory equivalent to Biol 471: Evolution. The student will be required to take Biol 512: Experimental Design and Analysis for the Life Sciences (3); Biol 548: Population Ecology (3); and Biol 527: Current Problems in Evolutionary Theory (3). The departmental requirement of at least two semester hours in seminar must also be satisfied. The balance of 19 semester hours to complete the 30 semester hours required for the Master of Science degree will be selected only with the approval of the student’s Graduate Committee from the following list of approved graduate courses:
- 522 Methods and Principles of Animal Taxonomy (Insects) (3)
- 523 Reproductive Strategies (3)
- 524 Coevolution of Plants and Animals (3)
- 526 Animal Navigation (3)
- 526 Paleocology (4)
- 532 Animal Behavior (3)
- 540 Environmental Biology I (3)
- 544 Advanced Plant Systematics (3)
- 545 Freshwater Ecology (4)
- 546 Marine Ecology (4)
- 547 Analysis of Terrestrial Ecosystems (4)
- 549 Biological Resource Management (3)
- 558 Tropical Ecosystems (3)
- 562 Problems in Development (3)
- 593 Independent Study in Biology (1-3)
- 599 Thesis (3-6)

Supporting Courses in Other Departments
- BuAd 531 Computer Systems for Management (3)
- BuAd 551 Quantitative Management (3)
- Econ 552 Advanced Regional and Urban Economics (3)
- Econ 555 Resource Economics (3)
- Econ 575 Economics of Urban Transportation Planning (3)
- Govt 325 Introduction to Public Planning (5)

* Available as elective within area.
** Required within area.
1 Marine Ecology may be substituted for Freshwater Ecology requirement.
Undergraduate-Graduate Courses
The following undergraduate courses have been approved for graduate credit. No more than two of these may apply to the degree. Course descriptions appear in the Undergraduate Catalog:

- 342 Plant Morphology (4)
- 344 Taxonomy of Flowering Plants (4)
- 412 Microbial Genetics (3)
- 413 Selected Topics in Genetics (3)
- 415 Population Genetics (3)
- 441 Plant Anatomy (4)
- 446 Environmental Physiology (3)
- 447 Microbial Ecology (4)
- 448 Symboleology (4)
- 462 Advanced Cellular Physiology (3)
- 464 Plant Physiology (4)
- 465 Histology (4)
- 471 Evolution (3)
- 480 Ichthyology (4)
- 482 Ornithology (4)
- 483 Mammalogy (4)
- 484 Vertebrate Paleontology (4)
- 485 Herpetology (4)

Graduate Courses

- 511 Human Genetics (3)
  Prerequisite: Biol 311 or the equivalent. A study of the inheritance of man. Emphasis will be on current problems, including genetic control of metabolic diseases, the effects of radiation and chemical agents in the environment, and directed genetic change. Three lecture hours.

- 512 Experimental Design and Analysis for the Life Sciences (3)
  Prerequisite: An undergraduate course in statistics (e.g., Biol 312), or permission of instructor. An advanced course in the application of probability and statistics to research in the life sciences. Examples to be drawn from environmental, medical, physiological, genetic, and chemical biology. Three lecture hours.

- 521 Origin of the Cultivated Plants and Their Impact on Man and Society (3)
  Prerequisite: One upper-division botany course, Biol 311 or equivalent, or permission of instructor. The geographic origins of the major economic plants of the world, their economic and cultural significance from prehistoric to modern times, and modern economic and nutritional problems of food distribution. Three lecture hours.

- 522 Methods and Principles of Animal Taxonomy [Insects] (3)
  Prerequisite: A previous course in entomology or permission of the instructor. A study of the theory of and techniques used in animal classification with emphasis on their practical application to a laboratory problem dealing with the insects. One hour of lecture, six hours of laboratory.

- 523 Reproductive Strategies (3)
  Prerequisite: Biol 311 or 344 or permission of instructor. The comparative reproductive biology of selected plants and animals and the relationship with population genetics, evolution and systematics in these organisms. Three lecture hours.

- 524 Coevolution of Plants and Animals (3)
  Prerequisite: A course in evolution. The course includes the mechanisms of evolution of plant and animal interactions, chemical communication, population dynamics, energetics of ecosystems, and development of the interactions over time. Three lecture hours.

- 525 Animal Navigation (3)
  Prerequisite: A previous course in Animal Behavior or Statistics, or permission of the instructor. A lecture and seminar course exploring the mechanisms by which animals orientate and navigate while homing or migrating. Emphasis will be placed on the vertebrates. Three lecture hours.

- 526 Paleoecology (4)
  Prerequisites: Two of the following or their equivalents: Biol 220, 342, 445, 471, 481, or Geol 102, or permission of the instructor. A study of the origin and evolution of the interrelationships between components of the earth's major ecosystems. Three lecture hours, three laboratory hours.

- 527 Current Problems in Evolutionary Theory (3)
  Prerequisite: A previous course in evolutionary theory or permission of the instructor. A seminar course on contemporary evolutionary thought. Three lecture hours.

- 531 Food, Energy and Insects (3)
  Prerequisite: A course in entomology or permission of instructor. The history and future of man's competition with insects in the fields of agriculture and medicine. Three lecture hours.

- 532 Animal Behavior (3)
  Prerequisite: Biol 324 or permission of instructor. A study of the ecological aspects of animal behavior. Three lecture hours.

- 540 Environmental Biology I (3)
  Prerequisite: A previous course in ecology or permission of instructor. The biological effects of modern man and his activities on the environment. Air-borne, water-borne, and solid "waste" material will be considered with respect to sources, control, and effects on the ecosystem. Air, water, and land resource utilization will be introduced. Three lecture hours.

- 544 Advanced Plant Systematics (3)
  Prerequisite: Biol 344 or equivalent. A study of the morphology and speciation of the more complex families such as Poaceae, Cyperaceae and Asteraceae. The lab emphasizes identification of specimens and acquaintance with taxonomic literature. One lecture hour, four laboratory hours.

- 545 Freshwater Ecology (4)
  Prerequisite: A course in ecology or permission of instructor. The physical and chemical features of freshwater lakes and streams and the relationship to the biota. Local streams and lakes will be investigated. Three lecture hours, three laboratory hours.

- 546 Marine Ecology (4)
  Prerequisite: A course in ecology. The physical and chemical features of marine environments and the relationship to the biota. Extended field trips will be made to localities on the Chesapeake Bay and Atlantic Ocean. Three lecture hours, three laboratory hours.

- 547 Analysis of Terrestrial Ecosystems (4)
  Prerequisite: A course in ecology. Knowledge of statistics is recommended. Ecosystem organization in relation to patterns of energy flow and mineral cycling; functional comparison of major world ecosystems and discussion of ecosystem models. Laboratory work will emphasize techniques of estimating biomass ecosystem components and measuring rates of ecosystem processes. Three lecture hours and three laboratory hours.

- 548 Population Ecology (3)
  Prerequisites: A course in ecology and permission of instructor. A course in evolution and knowledge of calculus is recommended. A survey of ecological models and theory. Topics to be covered include population growth and regulation, competition, predator-prey relationships, and models of community structure. Three lecture hours.

- 549 Biological Resource Management (3)
  Prerequisite: Biol 548, or permission of instructor. Modern ecological theories and methods applied to biological resource management covering problems from fisheries to forestry. Population modeling, problems in achieving optimum productivity of specific resources, application of systems analysis. Three lecture hours.

- 555 Selected Topics in Plant Biology (3)
  Prerequisites: Eight semester-hours of credit in Introductory Biology, one upper division course in botany, and permission of instructor. A problem in contemporary botany will be discussed. The topic will depend upon the specialty of the instructor. May be repeated only with permission, Chairman, Department of Biology. Three lecture hours.
558 Tropical Ecosystems (3)
Prerequisites: A course in ecology and one other upper level biology course or permission of the instructor. A consideration of the ecosystems in the tropics with special emphasis on the plant structure. The physical environment, natural vegetation, interactions between animals and plants and the effects of many will be discussed. A project is required, and a field trip to the tropics is offered. Three lecture hours.

562 Problems in Development (3)
Prerequisites: A previous course in embryology or developmental biology or permission of the instructor. Readings and seminars utilizing the current literature in developmental biology. Emphasis is placed on major problems including those of morphogenetic movements, differentiation, regeneration, aging and malignancy. The student becomes familiar with experimental organisms and systems of unique value in developmental biology. Three lecture hours.

565 Environmental Hazards to Human Health (3)
Prerequisite: A course in animal physiology or permission of instructor. Threats to human health resulting from the impact of man's industries and activities on the environment. Physiological effects of chemical pollutants of air, water, and food; problems from excessive noise, radiation, and over-crowding. Methods of identifying, evaluating, and controlling problems are considered. Three lecture hours.

571 Human Evolution and Ecology (3)
A materialistic study of the evolution of man and his prehistoric, historic and contemporary relationship with the natural environment. Three lecture hours.

591 Current Topics in Biology (1)
One seminar hour each week. May be repeated for credit.

592 Seminar in Environmental Biology (1)
A study of selected current problems in environmental biology. Topics of discussion will vary from term to term. One seminar hour each week.

593 Independent Study in Biology (1-3)
Prerequisite: Eight hours of graduate credit in biology and permission of the supervising instructor and Chairman, Department of Biology. A library, laboratory, or field investigation under the guidance of a member of the faculty. May be repeated up to a total of three credit hours.

599 Thesis (3-6)
Prerequisite: Permission of supervising instructor and Chairman, Department of Biology. Thesis based on a laboratory or field investigation conducted under the supervision of a member of the faculty. The number of semesters beyond two over which work on the project may be extended will be at the discretion of the supervisor. Students who have taken Biology 593 will receive three to five (3-5) credits upon completion of the thesis, with the total credits received for both Biology 593 and Biology 599 to be six (6). Students who do not take Biology 593 will receive six (6) credits upon completion of the thesis.
Master of Business Administration

This program is designed to provide a high level of professional education in the several functional areas of business administration. It is intended that this graduate program will serve:

1. Students who have recently earned the baccalaureate degree, either at George Mason University or at other colleges, and who wish to continue their education at the master's level.
2. Persons employed in business and government who hope to further their professional careers by earning a degree at the master's level.
3. Students who intend to continue toward the D.B.A. or Ph.D. degree at some other institution.

School Entrance Requirements

In addition to fulfilling the general entrance requirements, the applicants for the Master of Business Administration must:

1. Take the Graduate Management Admission Test (GMAT). Normally, a score of 500 or better is required.
2. Submit three letters of recommendation from professors with whom the applicant has studied or from others directly familiar with his professional competence.
3. Have an undergraduate Business Administration preparation, including "C" or better grades in the following undergraduate courses:

   | Courses                                      | Semester Hours |
   |----------------------------------------------|-----------------
   | Principles of Economics                      | 6               |
   | Introductory Accounting                      | 4-6             |
   | Applicants who have a nonbusiness baccalaureate may take an accelerated four semester-hour course (BuAd 400): otherwise, six semester-hours are required. |
   | Statistics                                    | 3-6             |
   | When an applicant has taken a three-hour course (covering up to and including linear regression, analysis of variance, and time series analysis) which is not one of a sequence, it will suffice for the statistics prerequisite. Also, an applicant who has a nonbusiness baccalaureate may take an accelerated four semester-hour course (BuAd 453); otherwise, six semester-hours are required. |
   | Principles of Management                      | 3               |
   | Principles of Marketing                      | 3               |
   | Introduction to Business Finance             | 3               |
   | Business Law                                 | 3               |

4. Applicants who have completed their undergraduate work in another discipline must complete the undergraduate prerequisite courses listed above prior to acceptance in the MBA program. These persons should consult an MBA adviser to determine if undergraduate work previously taken will fulfill any of the above requirements. Applicants otherwise qualified but lacking these prerequisites will be deferred pending their satisfactory completion.

School Degree Requirements

A candidate must fulfill the general degree requirements and the following:

1. Each candidate must complete the following MBA core courses unless, in the opinion of the School of Business Administration, the candidate has had previous work at the graduate level and may be granted exemption:
   - 501 Managerial Accounting
   - 511 Cases in Financial Administration
   - 521 Cases in Managerial Marketing
   - 531 Computer Systems for Management
   - 551 Quantitative Methods of Managerial Analysis
   - 591 Cases in Organizational Behavior
   - 595 Business Policy

2. Each candidate must also complete at least two graduate courses in one of the specialty areas:
   - Accounting
   - Administrative Management
   - Financial Management
   - International Business
   - Managerial Economics
   - Marketing Management and Research
   - Quantitative Methods

3. No credit is granted for work done in absentia or without formal instruction.

4. Upon completion of thirty hours of course work, including the MBA core and specialty requirements, the student may elect one of the following options to fulfill the final six hours of the thirty-six hour requirement for the degree:
   a. Thesis. A maximum of six credit hours may be earned.
   b. Additional coursework and research. The student will take one additional course on an elective basis, and BuAd 598 (Seminar in Business Research).

Special School Regulations

Provisional students and those non-degree students contemplating degree status should complete nine of their first twelve graduate hours from these core courses: BuAd 501, 511, 521, 531, 551, and 591.

1. A maximum of six semester hours of graduate credit in approved undergraduate courses (see list that follows) may be authorized; however, these courses must be taken after entry into the program and normally shall be taken prior to taking the related MBA core courses.
2. A maximum of six hours of elective credit in another graduate program of this University will be allowed provided they are in a related field and have prior approval of the School of Business Administration.
3. Academic work from another graduate program must have been completed within five (5) years prior to the date of admission to the Graduate School of George Mason University to be considered for transfer.

Sample Program

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>501 Managerial Accounting</td>
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<tr>
<td>511 Cases in Financial Administration</td>
<td>3</td>
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<tr>
<td>521 Cases in Managerial Marketing</td>
<td>3</td>
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<tr>
<td>531 Computer Systems for Management</td>
<td>3</td>
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<tr>
<td>551 Quantitative Methods of Managerial Analysis</td>
<td>3</td>
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<tr>
<td>591 Cases in Organizational Behavior</td>
<td>3</td>
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<td>Electives, of which at least six hours must be taken in one of the following specialty areas:</td>
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<tr>
<td>Accounting: 502, 503, 504, 505, 506, 507, 508, 509</td>
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<tr>
<td>Administrative Management: 541, 542, 543, 592, 593, 594</td>
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<tr>
<td>Financial Management: 503, 512, 513, 514, 519</td>
<td>9</td>
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<tr>
<td>International Business: 571, 572, 593</td>
<td>3</td>
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<tr>
<td>Managerial Economics: 561, 562 and 525 or 552</td>
<td>3</td>
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<tr>
<td>Marketing Management and Research: 522, 523, 525</td>
<td>3</td>
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<tr>
<td>Quantitative Methods: 552, 553, 556</td>
<td>3</td>
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<tr>
<td>595 Business Policy</td>
<td>3</td>
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<td>598 Seminar in Business Research and an additional elective course or</td>
<td>3</td>
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<tr>
<td>599 Thesis</td>
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<td>Total</td>
<td>36</td>
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Undergraduate-Graduate Courses

A maximum of six semester hours in approved undergraduate courses, taken after the student has been admitted to the MBA program, may be accepted in this program. The following courses in Business Administration have been approved for graduate credit. Course descriptions appear in the Undergraduate Catalog.

415 Management Information Systems (3)
430 Operations Management (3)
447 Futures Markets (3)

Graduate Courses

501 Managerial Accounting (3)
The use of accounting data for corporate financial planning and control. Topics included are profit planning, relevant costing, budgeting, measurement of performance and product costing. Lecture and discussion.

502 Financial Accounting Theory (3)
Theoretical and conceptual foundations examined. Current literature and theories studied to provide coverage of postulates, assumptions and standards underlying measurement criteria and practices of financial accounting. Lecture and discussion.

503 (formerly 515) Federal Taxation and Business Planning (3)
Analysis of federal taxation of business enterprises. Consideration of organizations, acquisitions, mergers, spinoffs, and other divestitures, from viewpoint of profit planning, cash flow and tax deferment. Emphasis on tax problems of corporations. Lecture and discussion.

504 Corporate Financial Reporting (3)

505 Accounting Systems (3)
Prerequisite: BuAd 501. The study of modern concepts for accounting systems. Includes accounting systems design and integration with other information systems. Case analysis and discussion.

506 Advanced Auditing Theory and Practice (3)
Prerequisite: BuAd 501. The study of generally accepted auditing standards and the theory supporting them. Application of auditing techniques, including statistical sampling. Legal liability of the auditor, role of the auditor in securities regulation, and auditing in a computerized environment. Lecture and case study.

507 Fund Accounting (3)

508 Seminar in Controllership (3)
Prerequisite: BuAd 501. The study of the nature and scope of the controllership function in public or private organization, particularly in regard to the development of policy and the evaluation of performance. Lecture and case study.

509 Seminar in Accounting (3)
Prerequisite: Completion of twenty-four semester hours in the graduate program. Study of selected areas in accounting theory, practice and methodology and the influence of selected aspects of other disciplines upon the development of accounting concepts. Research and discussion.

511 Cases in Financial Administration (3)
Applying the theories of finance to the formulation and application of policies. Internal financial analysis; financial forecasting; management of assets, rate-of-return; capital formation. Lecture and discussion.

512 Security Analysis (3)

513 Real Estate Planning and Development Seminar (3)
Prerequisite: BuAd 344 or equivalent course. Consideration of the planning and evaluation process for the utilization of land resources by the private and public sectors. Research and discussion.

514 Capital Markets and Institutions (3)
Structure, operations, regulations and economic significance of financial institutions including commercial and federal reserve banks, insurance companies, pension and trust plans, investment companies and investment banks coupled with an in-depth analysis of the money and capital markets and the role of institutions within these markets. Research and discussion.

519 Current Topics in Finance (3)
Prerequisite: BuAd 511. Topics of current or recent interest in the area of finance, including industrial, governmental, international or institutional applications. Primary emphasis upon techniques and methods of financial practice and influences of new legislation. Readings, discussion, case studies, and research.
521 Cases in Managerial Marketing (3)
The application of qualitative and quantitative techniques in approaching various marketing situations. Emphasis on the use of marketing research, product planning, pricing and target market determination. Case discussion; readings.

522 Marketing Seminar (3)
Prerequisite: BuAd 521. Selected problems in contemporary marketing. Developing new market segments, independent research projects and computer marketing games. Lecture, discussion, and laboratory.

523 Sales Management (3)
Prerequisite: BuAd 521. The examination of alternative sales techniques. Emphasis on the adaptability of marketing techniques and perspectives to the sales environment. Lecture, readings and case discussion.

525 Analytical Marketing (3)
Prerequisites: BuAd 521 and 551. An investigation into the structure of representative marketing models to determine the critical factors in their design and application, and to assess their adequacy in helping to solve marketing problems. Research, lecture and laboratory.

531 Computer Systems for Management (3)
Study of computers and their effect on management process. Approaches to analysis, design, implementation and use of computer information systems. Both hardware and software. Lecture and laboratory.

541 Seminar in Personnel Administration (3)

542 Seminar in Labor-Management Relations (3)
The U.S. labor movement and its present political-economic status. Legal environment surrounding labor relations and recent rulings by regulatory bodies. Executive orders and political forces influencing unions in the public sector. Emphasis on negotiation and administration of labor contracts at the local level. Lecture, cases, discussion, readings.

543 Organization Analysis and Development (3)
Prerequisite: BuAd 591. Application of theory and research in the study of organizational effectiveness. Emphasis on the diagnosis of contributing factors; use of models; and the design and implementation of organization development programs. Readings, discussion, case development and research.

551 Quantitative Methods of Managerial Analysis (3)
Scientific approach to managerial decision making. Systems analysis and model development, using statistical decision theory, linear programming and multivariate methods, are applied to business problems. Lecture and laboratory.

552 Management Science (3)
Introduction to operations research techniques and their application to managerial decision making. Computer simulation, Markov processes, queuing theory, inventory models, PERT and CPM, mathematical programming. Research, lecture, and laboratory.

553 Seminar in Applications of Management Science (3)
Prerequisite: BuAd 552. Focuses on the problems of model development and implementation involved in the practice of operations research in management science. Selected studies in both classical and contemporary applications; case analysis, research.

556 Computer Simulation (3)
Prerequisites: BuAd 531 and 551 or equivalent. Computer simulation as a scientific methodology, emphasizing model development, implementation and analysis of results. Applications to such areas as corporate planning, operations analysis and numerical analysis. Project, lecture and laboratory.

561 Managerial Economics I (3)
The use of economic theory as it applies to specific business situations and decisions. Production levels, price determination, costs, competition, profits, supply/demand. Lecture, cases, and discussion.

562 Managerial Economics II (3)
The application of economic analysis to business management; government economic policy; the use of national economic statistics; interpreting economic trends and developments; forecasting. Current economic problems and their effect on business. Lecture, cases, and discussion.

571 Theory and Policies of International Business (3)
Management of international business operations as segments or subsidiaries of U.S. firms. Problems of political stability, operations in developing countries, influences of U.S. trade and foreign policies. Lecture and discussion.

572 International Business Management (3)
Prerequisite: BuAd 571. Analysis and discussion of problems in international business. Emphasis on international market entry and expansion; financial considerations in the international context; and operating policies and procedures of multi-national companies. Lecture, cases, and discussion.

591 Cases in Organizational Behavior (3)
Study and application of principles of individual and group behavior to the solution of human problems in organizations. Relationships with superiors and subordinates in formulating and accomplishing personnel policies. Case discussion, readings, and research.

592 Purchasing and Materials Management (3)
Principles and practices of purchasing and materials management for the private firm, within the broader context of an industrial materials management system. Governmental procurement practices examined to a limited degree. Case discussion, readings, and research.

593 Seminar in Comparative Business Management (3)
Comparative analysis of business practices and management systems in different countries and under different economic, social and political systems. Generic characteristics of management and business enterprises as modified in varying environments. Seminar reports and term paper.

594 Small Business Ventures and the Entrepreneur (3)
A study of small business and its economic, competitive, and social environment. Lectures, case studies, and research are used to illustrate and develop solutions to potential problems of initiating, organizing, and managing a small business.

595 Business Policy (3)
Prerequisite: Completion of twenty-seven graduate semester hours in business. Examines entrepreneurial functions in business; determination of the field of business in which the firm will operate, its goals, corporate strategy to reach these goals, and major policies to implement the corporate strategy. Cases, readings, and discussion.

598 Seminar in Business Research (3)
Prerequisite: Completion of thirty graduate semester hours in business. Study of research design plans, methodologies, data collection and analyses and their application to business research projects. Student will prepare a written report covering an approved research topic in his specialty area.

599 Thesis (6)
Prerequisite: Must have completed thirty hours of graduate course work.
Master of Arts in Economics

This program is designed to provide students with the fundamentals of economic analysis and with specialized knowledge of the various fields offered. The program is designed to serve:
1. Students with recent baccalaureate degrees who wish to become qualified for employment with the numerous institutions, both public and private, in the metropolitan area and elsewhere that hire economists.
2. Individuals presently employed in business and government who desire to further their professional careers through graduate training in economics.
3. Students who intend to continue their advanced education toward a Ph.D. in economics at other institutions of higher learning.

Departmental Entrance Requirements

In addition to fulfilling the general entrance requirements, the applicant will normally be expected to hold a baccalaureate degree in economics. A student with an undergraduate major in a field other than economics may be admitted to the program if his record demonstrates sufficient background in economics and allied fields. The Department requires that undergraduate deficiencies be made up by completion of appropriate remedial work—to include intermediate macro and micro-economic analysis—taken without graduate credit. Before admission to degree status, a student must either submit satisfactory Graduate Record Examination scores or complete 6 to 12 hours of graduate coursework in non-degree status, or Extended Studies enrollment, with a grade-point average of at least 3.0.

Departmental Degree Requirements

The student must meet all the general requirements for a degree. In addition, the master’s program in economics requires 30 semester-hours of graduate credit, with a thesis option for which up to six semester-hours of credit may be granted. All students are required to take Econ 501 and 513, or their equivalent. Those selecting the non-thesis option are required to take Econ 544: Econometrics I. In special circumstances the department chairman may allow a student to apply up to six semester-credits toward the required 30 credits from electives chosen from closely related courses open for graduate credit in other departments.

Departmental Course Prerequisites

The normal prerequisites are given for each course. In special cases, however, the stated prerequisites may be waived with the consent of both the professor teaching the course and the Department Chairman.

Graduate Courses

500 Current Issues in Economics (3)
Prerequisite: Graduate standing or permission of the instructor. A special course for students with little or no background in Economics. Topics will include supply and demand, the operation of a free market system, stock and bond markets, and the role of the U.S. in the world economy. Current economic problems will be discussed. This course may be used in partial fulfillment of the course requirements in the teaching discipline for the master’s degree in education.
501 Microeconomic Theory (3)
Prerequisite: Econ 306 and 311. Theory of optimal behavior of consumers, firms and resource suppliers. Theories of choice under conditions of risk and uncertainty. Partial equilibrium analysis of competitive and non-competitive markets. General equilibrium analysis, welfare economics and introduction to capital theory.

505 Welfare Economics (3)
Prerequisite: Econ 306 and 311. The topics covered include Pareto optimality, social welfare functions, the voting paradox, indivisibilities, consumer and producer surplus, output and price policy in public enterprise. Qualifications of the basic welfare theorem caused by noncompeting market structures, external economies and diseconomies and secondary constraints. As time permits, Kaldor, Hicks, Scitovsky, Arrow, Little, Bergson and Samuelson will be discussed.

507 Monetary Theory and Policy (3)
Prerequisite: Econ 306 and 311. Theory of money, financial assets, and economic policy. Theory of the mechanisms through which central banking affects economic activity and prices. Analysis of the demand for money and its relationship to economic activity. The development of monetary theory with emphasis on current theories and controversies in the field.

513 Macroeconomic Theory (3)
Prerequisite: Econ 306 and 311. Classical, neoclassical, Keynesian and post-Keynesian theories of income and employment determination. Theories of inflation and growth. The demand for money and its implications for the effectiveness of monetary vs. fiscal policy.

516 Macrodynastic Economics and Economics of Technical Change (3)
Prerequisite: Econ 306 and 311. Classical and modern growth theories including "golden rule paths." The causes of business cycles and an analysis of the NBER's efforts in measuring and predicting cycles. Qualitative and quantitative aspects of technical change at the microeconomic and macroeconomic levels. Recent developments in large macroeconomic forecasting models.

517 Seminar in Monetary Theory and Policy (3)
Prerequisite: Econ 306 and 311. Selected topics of current interest will be discussed.

520 Labor Economics (3)
Prerequisite: Econ 306 and 311. Formal models of labor demand, supply, utilization and wage determination. The determination of factor shares in an open economy. The theory of collective bargaining and the impact of trade unions on wage rates and resource allocation. The measurement, types, and causes of unemployment. Benefit-cost analysis of manpower training and development projects.

521 Seminar in Labor Economics (3)
Prerequisite: Econ 306 and 311. An intensive study of union and management decision-making processes, the government's role in labor negotiations and dispute settlement, the economic analysis of discrimination and poverty, and the effectiveness of wage-price controls.

533 Public Finance (3)

541 Mathematical Economics I (3)
Prerequisite: Econ 306 and 311. Among the topics to be covered are set theory, functions, differential calculus, integration, series, and matrix algebra, with the special emphasis on the economic application.

542 Mathematical Economics II (3)
Prerequisite: Econ 306, 311, 541, or permission of instructor. Mathematical treatment of economic theories. Static and dynamic analysis of macro-models. Input-output analysis. Optimization techniques such as Lagrangian multipliers, linear programming, non-linear programming and game theory. General equilibrium theory: existence, uniqueness, and stability.

544 Econometrics I (3)
Prerequisite: Business Administration 261-262, or permission of instructor. Techniques of estimating relationships among economic variables. Introduction to multiple regression and problems associated with the single equation model-autocorrelation, multicollinearity, and heteroscedasticity.

546 Econometrics II (3)
Prerequisite: Econ 544, or permission of instructor. Econometric models and simultaneous equation systems. The problems of identification of parameters and least squares bias. An analysis of alternative estimation methods and block recursive systems.

552 Urban Economics (3)
Prerequisite: Econ 306 and 311 and 501, or permission of instructor. The economics of regional development and metropolitan growth, including the locational decisions of households and firms, and problems associated with high density urban economic activity, such as neighborhood effects, traffic congestion, pollution, discrimination and spatial monopoly.

555 Resource Economics (3)
Prerequisite: Econ 306 and 311. Introduction to benefit-cost and cost-effectiveness analysis in the context of resource management in the public sector. Emphasis on the development of water resources by the public sector and the experience of the Army Corps of Engineers and Bureau of Reclamation in project selection. Problems of uncertainty, time horizon considerations, joint costs, multiple benefits, non-quantifiable benefits and costs.

560 Economic Development (3)
Prerequisite: Econ 306 and 311. An analysis of the forces contributing to and retarding economic progress in developing countries. The role of foreign trade, economic integration, foreign investment, multinational corporations and technological transfers. Development strategies, including balanced vs. unbalanced growth, import substitution and planning.

563 Seminar on Latin American Development (3)
Prerequisite: Econ 306 and 311. An examination of economic characteristics and recent economic development of Latin America. Topics include industrialization and import substitution; the rural sector and agrarian reform; population and unemployment; foreign trade, and economic integration; development finance, foreign investment and assistance.

570 Industrial Organization and Public Policy (3)

573 Seminar in Industrial Organization (3)
Prerequisite: Econ 306 and 311. Topics will be selected from the following: the centrifugal and centripetal forces affecting aggregate and industry concentration; the impact of market structure on the rate of innovation; concentration and oligopolistic price behavior; constraints on oligopolistic pricing; vertical integration; traditional antitrust policy, regulation and state ownership.

575 The Economics of Urban Transportation Planning (3)
Prerequisite: Econ 306 and 311. An examination of issues and problems in urban transportation planning using various analytical techniques, the quantitative transportation planning process, the transportation model, pricing policies and congestion, transportation planning for the future, techniques of evaluation, environmental impact, socioeconomic impact.

580 Comparative Economic Systems (3)
Prerequisite: Econ 306 and 311. The theory and practice of capitalism, socialism, and corporatism are considered in historical perspective. Includes examination of the economics of representative contemporary countries.

581 History of Economic Thought (3)
Prerequisite: Econ 306 and 311. The development of economic analysis. Major figures in the history of economic thought and the tools of analysis they created. Major emphasis on the classical, neoclassical and Keynesian theories.

590 International Trade and Finance (3)
Prerequisite: Econ 306 and 311. The international mechanism of adjustment: price, exchange rates, income changes, and direct as well as indirect controls. The theory of trade: comparative costs and gains from trade. Commercial policy and customs unions. Private and public capital transfers. The role of the International Monetary Fund, World Bank, and other international agencies.

598 Directed Reading and Research (3)
Independent reading and a research paper on a topic agreed to by the student and a faculty member.

599 Thesis (3-6)
Those students who take Econ 598 and then elect the thesis option will receive three credits for Econ 599 upon completion of the thesis. Those students who do not take Econ 598 will receive six credits for Econ 599 upon completion of the thesis.
Master of Education Programs

The Department of Education offers the Master of Education degree in the following fields: Elementary Education, Guidance and Counseling, Reading, School Administration, School Supervision, Secondary Education, and Special Education.

Departmental Entrance Requirements

In addition to fulfilling the general entrance requirements of the Graduate School, the applicant must:
1. Possess a temperament appropriate for the teacher as required by Virginia Certification Regulations.
2. Meet specific requirements for the program desired. The entrance requirements for each program are shown immediately preceding the program outline. Students admitted provisionally because of low grade point averages normally will be required to reach the necessary grade point average by taking a course in Area I, II, and III of the program before being considered for admission as degree students.

Departmental Degree Requirements

In addition to fulfilling the general degree requirements of the Graduate School the candidate must:
1. Complete at least one course in each of the two foundations areas (i.e., [1] Historical, Philosophical, and Sociological, and [2] Psychological) and at least one course in research. Each student with his adviser should select courses which will broaden knowledge in those fields upon which professional school activities are based. In general, the following outline may serve as a guide to selections. (Please note that persons other than those preparing for positions in elementary and secondary schools may arrange with advisers for foundations courses not directly related to education.)

Area I, Historical, Philosophical, Sociological Foundation:

Educ 501, 502, 503, or 505

Area II, Psychological Foundations:

Educ 525, 526, 527, or 533

Area III, Research

Educ 590 or 591

2. Complete the number of semester hours required for the graduate program in which enrolled.

3. Pass a comprehensive examination covering the graduate program in which enrolled. The comprehensive examination at the conclusion of each student's program will be broadly conceived. Therefore, the student should support with independent reading those areas not chosen for coursework.

Student having an interest in research may elect a program requiring the preparation of a thesis. Students electing a thesis must include within the requirements for their program the following courses:

Educ 590, 591 and 599.

Program Requirements and Typical Programs

It is each student's responsibility to be aware of all requirements and to develop with the assigned adviser a program which will meet the requirements. The program should be developed as soon as possible after the student is admitted to degree status. The typical programs which appear for each degree are offered as examples. There is considerable flexibility as each student's personal program is developed within the indicated guidelines.
Elementary Education

The Master of Education Program in Elementary Education is designed to improve the competence of teachers working with children at the pre-elementary, lower elementary, and upper elementary levels.

Entrance Requirements
Students preparing for the pre-elementary specialization (infancy-kindergarten) must:
1. Possess a baccalaureate degree.
2. Submit evidence of three years of acceptable teaching or administrative experience in a pre-school or elementary school program. (This requirement would be waived for students who can provide evidence of certification at the Collegiate Professional level in elementary education by the State of Virginia or another jurisdiction.)
3. Submit recommendations by three persons qualified to judge professional competence.
   Students preparing for the elementary specialization must:
1. Provide evidence of certification at the Collegiate Professional level in elementary education by the State of Virginia or another acceptable jurisdiction.
2. Submit recommendations by three persons qualified to judge professional competence.

Sample Program

Courses  | Semester Hours
--------|-----------------|
Historical, Philosophical, and Sociological Foundations  | 3
Psychological Foundations  | 3
Research Methods and Utilization  | 3
Program Requirements  | 15
1. Basic Concentration  | 6
2. Area of Specialization  | 9
Approved Electives  | 6
Total  | 30

Guidance and Counseling

The Master of Education Program in Guidance and Counseling is designed to prepare students to function as counselors and personnel specialists in a variety of work settings, including elementary and secondary schools, colleges, and agencies.

Entrance Requirements
Students must satisfy entrance requirements under either 1 or 2 below.
1. Students preparing for elementary or secondary school guidance and counseling must:
   a. Provide evidence of certification at the Collegiate Professional level by the State of Virginia or another acceptable jurisdiction.
   b. Have completed one year of successful teaching experience at the level where qualification is desired.
   c. Be recommended by three professional educators in the position of principal, supervisor, or administrator, regarding the potential of the applicant for the field of guidance and counseling.
   d. Be interviewed and recommended for acceptance.
2. Students preparing for counseling and personnel work in colleges and other agencies must:
   a. Possess a baccalaureate degree.
   b. Have completed a minimum of 12 semester hours of undergraduate work in the behavioral sciences. (The Department requires that undergraduate deficiencies be made up by completion of appropriate work without graduate credit.)
   c. Submit three letters of recommendation concerning promise as a professional counselor or personnel specialist.
   d. Be interviewed and recommended for acceptance.

Degree Requirements

In addition to the Departmental Degree Requirements listed on page 44, students must take 6 hours of basic concentration courses, 9 hours in an area of specialization and additional coursework to meet the degree total of 30 semester hours. Normally, students will be required to take as the basic concentration, Educ 550 and 582, in that order. In addition, students normally will take 9 hours in one of the following specializations:
1. Pre-elementary Education (Infancy-Kindergarten) — Educ 511, 652, or other pre-elementary courses.
2. Elementary Education — Educ 538, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 584, or 652.

Sample Program

Courses  | Semester Hours
--------|-----------------|
Historical, Philosophical, and Sociological Foundations  | 3
Psychological Foundations  | 3
Research Methods and Utilization  | 3
Program Requirements  | 15
1. Core Courses  | 15
2. Specialization Courses  | 6-12
Approved Electives  | 6
Total  | 36

Sample Program

Courses  | Semester Hours
--------|-----------------|
Historical, Philosophical, and Sociological Foundations  | 3
Psychological Foundations  | 3
Research Methods and Utilization  | 3
Program Requirements  | 21-27
1. Core Courses  | 15
2. Specialization Courses  | 6-12
Approved Electives  | 6-12
Total  | 36

Degree Requirements

In addition to the requirements on page 44, students must complete 15 hours of core courses and from 6-12 hours in an area of specialization; and additional course work to meet the degree total of 36 semester hours. Students will be required to take as the basic concentration Educ 528, 531, 536, 636 and 637. In addition, students will take one of the following specializations:
Elementary School Guidance and Counseling Specialization — Educ 538 and 638A
Secondary School Guidance and Counseling Specialization — Educ 539 and 639B
Community Agency Guidance and Counseling Specialization — Educ 540, 541 and 639C
Higher Education Guidance and Counseling Specialization — Educ 544, 546, 548 and 639C

Sample Program

Courses  | Semester Hours
--------|-----------------|
Historical, Philosophical, and Sociological Foundations  | 3
Psychological Foundations  | 3
Research Methods and Utilization  | 3
Program Requirements  | 21-27
1. Core Courses  | 15
2. Specialization Courses  | 6-12
Approved Electives  | 6-12
Total  | 36

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Reading

The Master of Education Program in Reading is designed to permit qualified individuals to become reading specialists at the elementary or secondary level.

Entrance Requirements
The applicant must:
1. Provide evidence of certification at the Collegiate Professional level by the State of Virginia or another jurisdiction.
2. Have completed two years of successful teaching experience.
3. Be recommended by three professional educators in the position of principal, supervisor, or administrator, including at least one who has observed the applicant's teaching.

Degree Requirements
In addition to the requirements on page 44, students must complete another 3 semester hours in research and 21 semester hours in reading, to meet the degree total of 33 semester hours. Normally, students are required to take Educ 559 and/or 604; 601 or 602; 603, 605 or 607; 608 (6), or 608 (3) and 609 (3).

Sample Program Courses
<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Historical, Philosophical, and Sociological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Foundations</td>
<td>3</td>
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<tr>
<td>Research Methods and Utilization</td>
<td>6</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
</tr>
</tbody>
</table>

School Administration

The Master of Education Program in School Administration is designed to enable qualified individuals to prepare for positions of leadership (principal, assistant principal, department chairman, team leader) at the elementary or secondary school level.

Entrance Requirements
The applicant must:
1. Provide evidence of certification at the Collegiate Professional level by the State of Virginia or another jurisdiction.
2. Have completed two years of successful teaching experience, a portion of which must be at the level where qualification is desired.
3. Be recommended by three professional educators in the position of principal, supervisor, or administrator indicating the potential of the applicant for school administration, including at least one who has observed the applicant's teaching.

Degree Requirements
In addition to the requirements on page 44, students must take at least one course in each of the following:
1. Elementary or Secondary Curriculum.
2. School Administration.
3. Supervision of Instruction; plus Practicum (3 or 6).
    Approved electives bring the degree total to 30 semester hours.

Sample Program Courses
<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Historical, Philosophical, and Sociological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods and Utilization</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>12-15</td>
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<tr>
<td>Approved Electives</td>
<td>6-9</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

http://catalog.gmu.edu
School Supervision

The Master of Education Program in School Supervision is designed to enable qualified individuals to prepare for positions of leadership in school systems, i.e., general supervisor or coordinator, elementary supervisor, secondary supervisor.

Entrance Requirements

The applicant must:
1. Provide evidence of certification at the Collegiate Professional level by the State of Virginia or another jurisdiction.
2. Have completed two years of successful teaching experience, a portion of which must be at the level where qualification is desired.
3. Be recommended by three professional educators in the position of principal, supervisor or administrator, including at least one who has observed the applicant's teaching.

Degree Requirements

In addition to the requirements on page 44, students must take at least one course in each of the following:
1. Elementary or Secondary Curriculum.
2. School Administration.
3. Supervision of Instruction; plus Practicum (3 or 6).

Approved electives bring the degree total to 30 semester hours.

Sample Program

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical, Philosophical, and Sociological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Foundations</td>
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</tr>
<tr>
<td>Research Methods and Utilization</td>
<td>3</td>
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<tr>
<td>Area of Specialization</td>
<td>12-15</td>
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<tr>
<td>Approved Electives</td>
<td>6-9</td>
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<tr>
<td>Total</td>
<td>30</td>
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</tbody>
</table>

Secondary Education

The Master of Education Program in Secondary Education is designed to improve the competence of teachers who have completed a basic program in preparation for teaching and who hold the Virginia Collegiate Professional Certificate or its equivalent.

Entrance Requirements

The applicant must:
1. Provide evidence of certification at the Collegiate Professional level in secondary education by the State of Virginia or another jurisdiction.
2. Submit recommendations by three persons qualified to judge professional competence.

Degree Requirements

In addition to the requirements on page 44, students must complete at least 9 semester hours of courses in the teaching field or in a related discipline; Educ 551 and 583; and one of the following as related to the teaching field: Educ 565, 567, 568, 569 or 604. Approved electives bring the total to 30 semester hours.

Sample Program

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Historical, Philosophical, and Sociological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods and Utilization</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>18</td>
</tr>
<tr>
<td>1. Educ 551 and 583; 565, 567, 568, 569, or 604</td>
<td>9</td>
</tr>
<tr>
<td>2. Courses in the teaching field or in a related discipline Electives</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

http://catalog.gmu.edu
Special Education

The Master of Education Program in Special Education is designed to enable qualified individuals to become specialists in
1. General Special Education (emotional disturbance – ED; learning disabilities – LD; or mental retardation – MR) or
2. Education of the Severely Handicapped (early childhood handicapped – ECH ages two to eight years; or severely multi-handicapped – SMH)

Entrance Requirements

To be accepted as a degree student, each applicant must:
1. Submit recommendations by three persons qualified to judge professional competence.
2. Be interviewed and recommended for acceptance.
3. Submit a written autobiography (request details during interview).
4. a. For General Special Education specialization:
   i. have Virginia Collegiate Professional certification or the equivalent from another state.
   ii. complete or have completed one course in each of the following:
      - teaching of reading,
      - teaching of mathematics,
      - human growth and development, and
      - tests and measurements.
   b. For Education of the Severely Handicapped specialization:
      i. provide evidence of successful completion of a baccalaureate degree in a human services area, such as education, psychology, sociology, or allied health services, and
      ii. provide evidence of work related experience with severely handicapped individuals.

Degree Requirements

In addition to the requirements on page 44, students must complete 18 hours of core courses and 9 hours in an area of specialization. (Additional course work may be necessary if the Special Education Committee determines that a student lacks needed competencies.) General foundation courses common to all special education areas of emphasis are Educ 580 and either 501, 502, 503, or 505. The psychological foundations course required in General Special Education is Educ 526, while Educ 525 is required in Education of the Severely Handicapped.

The General Special Education (ED, LD, MR) recommended core course sequence is Educ 652, 657, 651, 601, 653, and 656. Courses in the specialization areas are:
1. emotional disturbance specialization. Educ 647 and 650A
2. learning disabilities specialization. Educ 648 and 650B.
3. mental retardation specialization. Educ 649 and 650C.

The Education of the Severely Handicapped (ECH, SMH) recommended core course sequence is Educ 652, 657, 662, 659, 663 and 656. Courses in the specialization areas are:
1. early childhood handicapped specialization. Educ 660 and 650D.
2. severely multi-handicapped specialization. Educ 661 and 650E.

Sample Program

Courses | Semester Hours
--- | ---
Historical, Philosophical, and Sociological Foundations | 3
Psychological Foundations | 3
Research Methods and Utilization | 3
Program Requirements | 27
1. Core Courses | 18
2. Area of Specialization | 9
Total | 36

Students should make application for practicum or internship one semester prior to enrollment, observing the following dates for application:
- For Fall semester by May 15
- For Spring semester by October 15
- For Summer semester by March 1

Graduate Courses

Prerequisites: All graduate education courses, unless exception is indicated, have the following prerequisite: Collegiate Professional Certificate or equivalent, or permission of the Department. Specific additional prerequisites pertaining to each course are listed with the course description.

500 In Service Educational Development (1, 2, 3, 4, 5, 6)
Prerequisites: Employment in professional capacity by sponsoring division or agency. Offered at request of school division or other educational agency. Content varies. May be repeated. No more than 6 semester hours of Educ 500 and/or Educ 600 may be applied to degree credit.

501 History of Education in Western Culture (3)
A critical historical analysis of old world backgrounds influencing education in the United States.

502 History of Education in America (3)
An examination of the development of the American education system.

503 Philosophy of Education (3)
A critical examination of selected ancient and contemporary philosophies and their impact upon educational thought and practice.

505 Social Problems in Education (3)
An appraisal of the changing role of the American school system in society, relationships to other institutions, the social purpose of the school, and major social problems involving the school and possible solutions.

507 School-Community Relations (3)
The principles, philosophy, practices and agencies involved in developing and maintaining desirable relationships between schools and the communities they serve.

508 Human Relations for Educators (3)
This course seeks to enable students: 1) to develop greater understanding of self as an individual and of self as part of various social systems; 2) to develop greater competence in facilitating communication; 3) to develop skills for utilizing and creating exercises for personalizing education; and 4) to develop greater competence in dealing with persons of other racial or ethnic groups.

511 Preparing the Pre-Elementary Environment (3)
An advanced course in the general procedures, materials, and organization of environments for young children (infancy-kindergarten). Field experiences will be required for students without previous teaching or administrative experience at the pre-elementary level.

525 Advanced Human Growth and Development (3)
An advanced course relating to human development through the life span including the development of the child through education, the unfolding of human abilities in terms of personal adjustment and achievement.
526 Advanced Educational Psychology (3)
An advanced course relating to learning theory, motivation, personality development, social and emotional behavior and student attitudes.

527 Evaluation of Student Progress (3)
Teacher evaluation of the progress of the learner through observation of performance and through measurement devices in the classroom. Teacher interpretation of standardized tests given in the schools.

528 Group Processes and Analyses (3)
Includes theories appropriate to various types of groups, as well as descriptions of group practices, methods, dynamics, and facilitative skills. Attention is given to application of theory in practice.

531 Educational and Psychological Measurement (3)
Techniques and principles used in the construction, administration, and quantification of measuring devices for evaluation purposes; interpretation of standardized tests of ability, aptitude, achievement, interest, and personality.

533 Mental Health in the School Program (3)
Mental health problems in the school emphasizing control of the school environment as an influence on mental health. Dynamics of behavior, personal and social maladjustments.

536 Analysis of the Individual (3)
Prerequisite: Educ 531. Development of a framework for understanding the individual, including methods of data gathering and interpretation, choosing, administering, and interpreting individual and group tests; the study of individual differences; use of case study technique.

538 Theories, Principles, and Practices of Guidance in the Elementary School (3)
Study of the basic philosophy and nature of guidance services in the elementary school situation. Emphasis is placed on the role of various school personnel in helping to meet the developmental needs of the elementary school pupil.

539 Principles and Practices of Guidance (3)
An introductory survey of guidance in the school: definitions, scope, principles, historical background, organization, service, emerging trends, and issues.

540 Guidance and Counseling in the Community Agency (3)
Study of guidance and counseling services within community agencies. Emphasis will be placed on the types of services and facilities provided, needs and problems of the client population served, role and function of the counselor or guidance worker in the particular setting, and personnel needs of the individual agency.

541 Case Studies in Agency Counseling (3)
Prerequisites: Educ 536, 540, and 636. By using actual and hypothetical cases the course will help the student develop written plans and simulate implementation for overall treatment of agency clients and their families.

544 College Student Personnel Work (3)
The introductory course for students interested in entering student personnel work at the college level. The study of theory, nature, and background of student personnel work in higher education. Structure, organization, and administration of services and programs.

546 College Students and Campus Groups (3)
Prerequisite: Educ 544. Study of the nature, characteristics and needs of college students as they interact in groups which form student subcultures on campus. Analysis of college student development programs which relate to campus groups, group activities, and development of student leadership.

548 Seminar in College Student Personnel Work (3)
Prerequisites: Educ 544 and 546. Current social and legal issues in college student personnel work including professional ethics and standards. Role of counseling, consulting, and collaboration with students and other educators in efforts to facilitate student development and self-direction.

550 Curriculum Development in the Elementary School (3)
Development of the curriculum in the pre-elementary, lower elementary, and upper elementary levels, historical backgrounds, present programs, development of new programs, methods of implementing new programs, and evaluative methods and procedures.

551 Curriculum Development in the Secondary School (3)
Development of the curriculum in the secondary school, historical backgrounds, present programs, development of new programs, methods of implementing new programs, and evaluative methods and procedures.

552 School Supervision (3)
Prerequisites: Teaching experience and Educ 550 or 551. Basic principles and practices of school supervision. Elementary, middle, and high school specialization may be accomplished through options in reading and project assignments.

555 School Administration (3)
Prerequisite: Teaching experience. Basic principles and practices of school organization and administration. Emphasis on elementary, middle, and high schools with reference to state and district structures.

557 Teaching Language Arts in the Elementary School (3)
Study of methods, curricula, current issues, and research literature in English-language arts programs of the elementary school. Emphasis will be placed on recent innovations in methodology and the traditional concerns of the communication arts.

558 Teaching Social Studies in the Elementary School (3)
Prerequisite: A basic course in teaching social studies in the elementary school. An advanced course in the methods, materials, content, and organization of social studies programs in the elementary schools.

559 Teaching Developmental Reading in the Elementary School (3)
An advanced course covering the foundations of reading; principles, techniques, and materials for developmental reading programs in the elementary grades.

560 The Diagnostic Teaching of Reading in the Elementary School (3)
Prerequisite: A basic course in reading. An advanced course in the use of diagnostic techniques, diagnostic instruments, and evaluation to individualize the reading instruction in the classroom. Primarily designed for classroom teachers.

561 Literature in the Elementary School (3)
Prerequisite: A basic course in children's literature. An advanced course relating to children's literature.

562 Teaching Music in the Elementary School (3)
Prerequisite: A basic course in music for the elementary school. An advanced course for elementary teachers in the principles and practices of music for children.

563 Teaching Science in the Elementary School (3)
Prerequisite: A basic course in teaching science in the elementary school. An advanced course in the subject matter, methodology, and materials involved in the teaching of physics and chemistry to elementary school children.

564 Teaching Art in the Elementary School (3)
Prerequisite: A basic course in art for the elementary school teacher. An advanced course designed to present elementary teachers with skills and knowledge necessary for the development of arts programs in various media and materials.

565 Production of Instructional Materials (3)
Prerequisite: A basic course in instructional media. A course designed to prepare teachers with the basic knowledge needed to produce inexpensive teaching materials. Planning, production techniques, and evaluation standards are emphasized. Students are given an opportunity to work on individual projects in their own subject fields.

566 Teaching Mathematics in the Elementary School (3)
Study of the curricula, current issues, and research literature in elementary school mathematics. Analysis of current methodologies and goals of mathematics at the elementary school level. Emphasis will be placed on the development of different styles of teaching.

567 Teaching Social Studies in the Secondary School (3)
Prerequisite: A basic course in secondary school teaching methods. An advanced course in the methods, materials, content, and organization of social studies programs in the secondary schools.

569 Teaching Language Arts in the Secondary School (3)
Prerequisite: A basic course in secondary school teaching methods. An advanced course in the methods, materials, content, and organization of language arts programs in the secondary school.

570 School Law (3)
This course is designed to provide the background in school law needed by school administrators, supervisors, counselors, and others.
572 Teaching Mathematics in the Secondary School (3)
Study of the curricula, current issues, and research literature in secondary school mathematics. Analysis of current methodologies and goals of mathematics education in secondary schools. Emphasis will be placed on the development of different styles of teaching.

573 Teaching Science in the Secondary School (3)
An advanced course in the methods, materials, content, and organization of science programs. Emphasis on curriculum planning, current methodologies, and trends in science education in secondary schools.

575 Internship in Lower Elementary Teaching (6)
Prerequisites: Admission to preparation phase of program and certification requirements except for internship, or permission of the Department. Open only to students already enrolled in this program. A full time program of observation, teaching, and participation in school activities conducted in a public school.

576 Internship in Upper Elementary Teaching (6)
Prerequisites: Same as 575. A full time program of observation, teaching, and participation in school activities conducted in a public school.

577 Internship in Secondary School Teaching (6)
Prerequisites: Same as 575. A full time program of observation, teaching, and participation in school activities conducted in a public school.

580 Practicum in School Leadership (3, 3; or 6)
Prerequisite: Permission of program coordinator; admission to and completion of graduate program except for practicum, or enrollment in final term of program. Students translate administrative and supervisory theory into practice through field experiences and intensive seminar inquiry. Placement is in elementary, middle school, high school, or central office situations according to student’s program. A total of six semester hours is normally required.

582 Seminar in Pre-Elementary and Elementary School Teaching (3)
Prerequisite: Student must have completed graduate program except for seminar, or be in final semester of program, or permission of Department. Application of graduate coursework to instructional situations through discussion, projects, and reports related to practice and/or research.

583 Seminar in Secondary School Teaching (3)
Prerequisite: Student must have completed graduate program except for seminar, or be in final semester of program, or permission of Department. Application of graduate coursework to instructional situations through discussion, projects, and reports related to practice and/or research.

584 Middle School Education (3)
Specialized study of middle school education in America.

585 Seminar in School Leadership (3)
Prerequisites: Educ 550 or 551, 552, and 555; admission to the degree program in school leadership or permission of the Department. Advanced study in school leadership for the evaluation and facilitation of instruction. Emphasis will be placed on individual and group processes in supervision. Field experiences required.

590 Methods of Educational Research (3)
Research design and techniques. Use of research tools and analysis of data in education.

591 Educational Statistics (3)
The bases of statistical inference, sample variance and chi-square distribution, analysis of variance and factorial analysis, sampling from binomial and multinomial populations, and distribution-free methods of analysis.

592 Problem (3)
Prerequisite: Educ 590 or 591. A problem of interest to the student, study will utilize accepted research methods under the supervision of a member of the graduate faculty.

594 Special Topics (3)
Prerequisites: Admission to a degree program and completion of 9 semester hours of course work for graduate credit. By arrangement. May be repeated. Various subjects, principally by directed study, discussion, and research.

599 Thesis (6)
Prerequisites: Educ 590 and 591. The study of a significant problem of interest to the student, utilizing accepted research methods under the supervision of a member of the graduate faculty.

600 Workshop in Education (1, 2, 3, 4, 5, 6)
Concentrated full time workshops, week-end seminars and workshops dealing with selected topics in education, educational tour seminars, etc. May be repeated. No more than 6 semester hours of Educ 500 and/or Educ 600 may be applied to degree credit.

601 Remedial Reading (3)
Prerequisite: Educ 559 or 604. Nature and cause of reading difficulties; organization of remedial reading programs; use of remedial techniques, teacher aids and learning centers, psychological and health services, and innovative methods and materials.

602 Physical and Psychological Factors in Reading (3)
Prerequisite: Education 559 or 604. An advanced course on the physical and psychological factors involved in the reading process, clinical diagnosis and remediation.

603 Diagnostic and Evaluative Techniques in Reading (3)
Prerequisites: Admission to graduate program in reading. Educ 601 or 602, and Educ 531 or 591. A technical course in diagnosing reading problems. Procedures in testing, scoring, and evaluation of standardized and informal tests, individual and group tests, physical and psychological tests, and techniques of reporting the test results.

604 Teaching Reading in the Secondary School (3)
A course for teachers in the secondary or in the intermediate schools. Reading in content areas; reading problems; causes, diagnosis, remediation; skills, and speed reading.

605 Teaching Reading to the Culturally Disadvantaged (3)
Prerequisite: Educ 559 or 604. A course designed to develop competencies in reading methods for the disadvantaged. Emphasis will be placed upon method techniques, innovative designs for teaching the disadvantaged child. Consideration given to problem areas, linguistic differences, pre-reading skills and the psychological development of the child.

607 Teaching Reading to the Gifted (3)
Prerequisite: Educ 559 or 604. A course dealing with the higher levels of reading attainment: speed reading, critical reading, advanced study skills, intellectual needs of the gifted, and literature and materials for enrichment programs.

608 Practicum in Reading (3 or 6)
Prerequisites: Admission to and completion of graduate program in reading except for practicum or enrollment in final semester of program. Supervised practice in the Educational Child/Youth Study Center: work with individuals and small groups using a variety of reading procedures. Participation in scheduled group sessions required.

609 Internship in Reading (3)
Prerequisites: Admission to and completion of graduate program in reading except for practicum or enrollment in final semester of program. A program of supervised teaching and participation as a reading specialist in a public school system. Participation in scheduled group sessions required.

625 Utilization of Instructional Technology (3)
A consideration of the effective utilization of educational technology in the teaching-learning situation.

636 Counseling Theory and Practice (3)
Prerequisites: One of the following: Educ 538, 539, 540, or 544. A study of the basic theories, principles, and techniques of counseling and their applications to counseling settings.

637 Career and Educational Counseling (3)
Prerequisites: Educ 531 and one of the following: Educ 538, 539, 540, or 544. Vocational choice theory, sources of occupational and educational information, approaches to career decision making processes, and career development exploration techniques.

638 Organization and Administration of a Guidance Program (3)
Prerequisite: Educ 538 or 539. Principles of organizing and administering a guidance program with emphasis on the role and functions of school personnel in various organizational programs, and major services of the adequate guidance program.
639 Practicum in Guidance and Counseling: (3)
A. Elementary School,
B. Secondary School,
C. Other than Elementary or Secondary School
Prerequisites: Admission to and completion of the graduate program in guidance and counseling except for practicum or enrollment in final term of student program. Supervised practice in guidance and counseling in a setting similar to that in which the student plans to work. (Elementary and secondary school practicum open to certificated personnel only. All other students will be placed in a setting related to their career goals.)

647 Curriculum and Methods – Emotionally Disturbed (3)
Prerequisite: Permission of Special Education Committee. Study of the teacher's role in providing curricular and instructional approaches for alleviating behavior disabilities. Emphasis on individualized programming procedures and classroom management techniques. Laboratory experience required.

648 Curriculum and Methods – Learning Disabilities (3)
Prerequisite: Permission of the Special Education Committee. Study of educational programming procedures for children experiencing specific learning disabilities. "Systems approach" to teaching emphasized. Laboratory experiences required.

649 Curriculum and Methods – Mental Retardation (3)
Prerequisite: Permission of Special Education Committee. Study of educational programming for the mentally retarded. Emphasis on the design, implementation, and evaluation of current programs and procedures which promote the behavioral and academic achievement of mentally retarded individuals to the highest potential possible. Laboratory experience required.

650 Internship in Special Education: (3 or 6)
A. Emotionally Disturbed,
B. Learning Disabilities,
C. Mentally Retarded,
D. Early Childhood Handicapped,
E. Severely Multi-Handicapped
Prerequisite: Permission of Special Education Committee. Design and implementation of educational programming for handicapped children (with a supervised internship) in a public school system, approved private school, hospital, or clinic. Participation in scheduled group sessions required.

651 Neuroeducational Considerations of Learning Problems (3)
Prerequisite: Educ 652 or permission of Department. Focuses on medical and behavioral characteristics of the mentally retarded and learning disabled. Emphasis is on implications for educational planning. Laboratory experience may be required.

652 Survey of Special Education (3)
Overview of special education designed to acquaint students with historical developments related to identification, labeling, placement, and education of exceptional children. Laboratory observation required.

653 Teaching Remedial Mathematics (3)
Study of techniques for assessing and remediating difficulties in mathematics. Laboratory experience required.

654 Characteristics and Identification of Gifted (3)
Study of characteristics associated with gifted and talented youngsters. Techniques and procedures for identification emphasized. Laboratory experience may be required.

655 Curriculum and Methods – Gifted and Talented (3)
Study of teaching the gifted and talented with emphasis upon cognitive styles, strategies for developing creative thinking, and curriculum content modification. Laboratory experience required.

656 Psychoeducational Assessment in Special Education (3)
Prerequisites: A basic course in tests and measurements and permission of the instructor. Administration, scoring, and interpretation of a wide range of formal and informal education testing instruments with emphasis on the generated educational plan and written report. Laboratory experience required.

657 Emotional and Behavioral Disorders of Children (3)
Prerequisite: Educ 652 or permission of Department. Critical survey of developmental, etiological, and psychological disorders of children; study of behavioral manifestations of specific disorders; and analysis of desired teacher behaviors for successful educational intervention. Laboratory experience may be required.

658 Socialization of the Handicapped (3)
Survey of socialization theory and related socialization intervention techniques specifically applied to handicapped children and youth. Students will explore theories and have opportunities to apply classroom management interventions in simulated and/or actual situations. Laboratory experience may be required.

659 Language Development and Disorders (3)
Influence of conflicting theories concerning language acquisition; analysis of verbal and nonverbal communication; techniques of language assessment; and strategies for language intervention.

660 Curriculum and Methods – Early Childhood Handicapped (3)
Emphasis placed on planning, organizing, and implementing educational programs for handicapped children ages two to eight years. Students are required to develop curricula designed for children having specific handicapping conditions. Focuses on strategies for developing skills of daily living and communicating educational plans to others. Laboratory/field experience required.

661 Curriculum and Methods – Severely Multi-Handicapped (3)
Emphasis on recognition of influence of handicapping conditions on learning processes and socialization; formulation, implementation, and evaluation of individualized educational programs for children having specific handicapping conditions; focus on development of self-care and educational skills of daily living. Laboratory/field experience required.

662 Medical and Health Aspects of Handicapping Conditions (3)
Prerequisites: Educ 525 or 652 or permission of Department. The nature and causes of disabling and/or special health conditions. Explored are screening and evaluation techniques, treatment goals, and intervention procedures. Focuses on educational implications.

663 Precision Teaching for the Severely Handicapped (3)
Prerequisites: Educ 652, 662 or permission of Department. Stressed are methodological tools generated from behavioral principles for instruction of the severely handicapped. A task analysis approach to developing individual instructional programs will be utilized in the areas of basic behavior control, self-help, and pre-academic skills.

Supporting Courses in Teaching Fields

The 500-level graduate courses in American Studies, Biology, Business Administration, Chemistry, Economics, English, French, Government, History, Mathematics, Physics, Public Administration, and Spanish provide the subject matter for students seeking a master's degree in secondary education with an emphasis in these fields. In addition, certain undergraduate-graduate courses have been approved by the Graduate Council as acceptable for graduate credit. See page 68 and departmental listings for further information.
English

Department of English Faculty
Professors: Sundell (Chairman), Baxter, S. Brown, Garson, Jackson, Kominars, Molin, Walls
Associate Professors: L. Brown, Gras, Karlson, Keith, Kelley
Assistant Professors: Acharya, J. Bergmann, Bjarkman, Brunette, Eisner, Foreman, Gallehr, Grossberg, Keaney, Kuebrich, Nadeau, O’Connor, Owens, Palmieri, Radner, Rutledge, Story, Sullivan, Thaiss, Walowit

Master of Arts in English
The graduate program in English is designed to be sufficiently flexible to provide professional training in the study of English and American literature to students with widely differing aims. Those it should serve primarily may be grouped in the following categories:
1. Persons who wish to become candidates for the doctorate in English at another institution after earning their master's degrees.
2. Prospective teachers of English in secondary schools and community colleges.
3. Teachers who wish to improve their professional competence.

Departmental Entrance Requirements
Applicants must fulfill the general entrance requirements. Those with undergraduate majors in disciplines other than English are encouraged to apply for admission, but they may be required to make up deficiencies by taking appropriate undergraduate courses without graduate credit. Although the Department does not require letters of recommendation, it will accept as many as three in support of applicants who believe such letters essential to a clear presentation of their qualifications.

Departmental Degree Requirements
In addition to fulfilling the general degree requirements, candidates must satisfy the following departmental requirements:
1. Complete 30 semester-hours of credit in graduate English courses. Six of these hours may be in approved undergraduate courses, and another six hours may be in Thesis. With the approval of the Department, six hours of graduate credit in courses in related disciplines may be substituted for six hours in English.
2. Pass Engl 501 (Literary Scholarship) normally in the first semester of study.
3. Meet the following distribution requirements:
   a. at least six hours in English and/or American Literature Before 1900;
   b. at least one seminar in the Major Figures Series (565-581). The course used to fulfill this requirement may not be used to satisfy requirement 3a.
4. Select early in the program in consultation with a departmental adviser one of the following options:
   a. to write a thesis (6 hours);
   b. to elect nine hours of a core program organized by period, genre, theme, or some other principle approved by the adviser and the Chairman. No more than six hours selected to fulfill requirement 3 above may also be applied to this requirement;
   c. to elect six hours of specialization in courses concerned with instruction of composition and literature (currently 510, 515, 520, and 521).
5. If the student has not already passed 12 hours of undergraduate credit in a foreign language, he must either do so or demonstrate the equivalent proficiency by passing an examination administered by the Department of Foreign Languages.

Sample Programs
The following sample programs are illustrative, not prescriptive. To develop a program suited to his particular aims, the student should consult with his departmental adviser.
1) Sample Program for a Student Planning to Continue to the Doctorate
501 Literary Scholarship (3)
505 Literary Theory and Criticism (3)
520 Descriptive Linguistics (3)
540 Studies in Nineteenth Century English Literature (3)
545 Studies in Twentieth Century English Literature (3)
550 Studies in Seventeenth and Eighteenth Century American Literature (3)
565 Seminar in Shakespeare (3)
575 Seminar in a Major Figure in English Literature After 1800 (3)
599 Thesis (3, 3)

2) Sample Program for a Student Planning to Teach in Secondary School or Community College
501 Literary Scholarship (3)
510 Proseminar in Literature Instruction (3)
515 Proseminar in Composition Instruction (3)
520 Descriptive Linguistics (3)
540 Studies in Nineteenth Century English Literature (3)
545 Studies in Twentieth Century English Literature (3)
555 Studies in Nineteenth Century American Literature (3)
560 Studies in Twentieth Century American Literature (3)
565 Seminar in Shakespeare (3)
580 Seminar in a Major Figure of American Literature (3)

3) Sample Program for a Student Desiring to Enhance His Enjoyment of Literature
501 Literary Scholarship (3)
525 Studies in English Medieval Literature (3)
530 Studies in English Renaissance Literature (3, 3)
535 Studies in Eighteenth Century English Literature (3)
540 Studies in Nineteenth Century English Literature (3)
555 Studies in Nineteenth Century American Literature (3)
560 Studies in Twentieth Century American Literature (3)
565 Seminar in Shakespeare (3)
575 Seminar in a Major Figure of English Literature after 1800 (3)

Undergraduate-Graduate Courses
The following undergraduate courses have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

403 Theory and Practice of Editing
431 Medieval Intellectual Topics
441, 442 Studies in English and American Literary Topics, Periods or Genres
444 Selected Major English and American Writers Before 1900
446 Selected Major English and American Writers of the Twentieth Century
451 Introduction to Literary Criticism
455 Literary Style
457 Old English
467 Advanced Expository Writing
469 Seminar in Creative Writing

Graduate Courses
501 Literary Scholarship (3)
The methods and purposes of literary research, including study of library methodology, use of critical bibliographies, techniques of textual criticism, and the evaluation of various approaches to literary history.
505 Literary Theory and Criticism (3)
The major theories of literature and methods of analyzing and evaluating literary works. Specific content will vary and will be announced before registration. This course may be repeated for credit with the permission of the Department. Past offerings are listed below:
505A From Matthew Arnold to the Present.
510 Proseminar in Teaching the Reading of Literature (3)
The methods of teaching literature. Includes the study of various methods of literary analysis and of the most effective ways of developing student responses to literature, with some classroom practice. (This course does not satisfy the State of Virginia certification requirements in diagnostic or developmental reading.)
515 Proseminar in Composition Instruction (3)
The methods of teaching expository writing. Includes consideration of the planning of courses, practice in teaching and in grading papers, and study of the laboratory method of instruction.
520 Descriptive Linguistics (3)
An introduction to the terminology and methodology of modern linguistic science, and a detailed structural analysis of English phonology, morphology, and syntax.
521 Applied Linguistics: Teaching English as Foreign Language (3)
Prerequisite: Linguistics (descriptive or historical, graduate or undergraduate). Theories and basic principles of the acquisition of a second language, especially as they relate to the English language, supplying students with methods of teaching English to speakers of other languages.
525 Studies in English Medieval Literature (3)
Selected literary authors, works, or movements, generally excluding Chaucer, from between 1300 and 1500, studied in Middle English. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
525A Middle English Lai and Romance.
English 530 Studies in English Renaissance Literature (3)
Selected literary authors, works, or movements, generally excluding Shakespeare and Milton, of the English Renaissance. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
530A Renaissance Tragedy
530B The Pastoral Tradition
530C Seventeenth Century Prose
530D Mixed Forms in Renaissance Drama
535 Studies in Eighteenth Century English Literature (3)
Selected English literary authors, works, or movements of the eighteenth century. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
535A Sexual Motifs in Eighteenth Century Poetry, Prose, and Drama
535B Education and Self-Realization in Eighteenth Century Literature
535C The Augustan Age
540 Studies in Nineteenth Century English Literature (3)
Selected English literary authors, works, or movements of the nineteenth century. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
540A Major Victorian Poets
540B The Byronic Mode
540C Novels of Maturation
540D The Morality of Sin
545 Studies in Twentieth Century English Literature (3)
Selected English literary authors, works, or movements of the twentieth century. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
545A The "Theatre of Cruelty" in Recent British Drama
545B Developments Since World War II in English Literature
545C Contemporary English Drama
550 Studies in Seventeenth and Eighteenth Century American Literature (3)
Selected literary authors, works, or movements of colonial and early federalist America. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:
555 Studies in Nineteenth Century American Literature (3)
Selected American literary authors, works, or movements of the nineteenth century. Specific content will vary from semester to semester and will be announced before registration. This course may be
repeated for credit with the permission of the department. Past offerings are listed below:

555A The American Renaissance
555B The Early American Novel
555C The Development of the American Novel: 1865-1914
560 Studies in Twentieth Century American Literature (3)
Selected American literary authors, works, or movements of the twentieth century. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

560A Literature of the Twenties
560B American Drama of the Thirties
560C The American Naturalistic Novel
560D Contemporary American Experimental Fiction

565 Seminar in Shakespeare (3)
Intensive study of the achievement of Shakespeare and the major critical approaches to this work. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

565A Shakespeare's Comedies and Histories
565B Shakespeare's Tragedies and Romances
570 Seminar in Major Figures to English Literature Before 1800 (3)
Intensive study of the work of one or two major figures of English Literature before 1800. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

570A Milton
570B Donne
570C Blake
570D Chaucer

575 Seminar in Major Figures of English Literature After 1800 (3)
Intensive study of the work of one or two major figures of English Literature after 1800. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

575A Wordsworth
575B Keats
575C Joyce
575D Lawrence and Hardy

580 Seminar in Major Figures of American Literature (3)
Intensive study of the work of one or two major figures of American Literature. Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

580A Twain
580B Eliot
580C Stevens
580D Faulkner
580E James and Cather
580F Melville

585 Selected Topics, Movements, or Genres of Literature in English (3)
Specific content will vary from semester to semester and will be announced before registration. This course may be repeated for credit with the permission of the department. Past offerings are listed below:

585A Literary Modernism
585B The Unconscious In Twentieth Century Literature
585C Romantic Theories of Myth
585D Popular Culture and Literature

595 Directed Reading and Research (3)
Prerequisite: Open only to degree students who have completed 15 credit hours including Engl 501 and have pre-registered for the course. Reading and research on a specific project, under the direction of a department member. An oral or written report is required.

599 Thesis (3-6)
Those students who take Engl 598 and then elect the thesis option will receive three (3) credits for Engl 599 upon completion of the thesis. Those students who do not take Engl 598 will receive six (6) credits for Engl 599 upon completion of the thesis.

600 Workshop in English (1-3)
Prerequisite: Admission to the Graduate Program or permission of the Department. Concentrated workshops, educational tours, and special seminars dealing with selected topics in writing, linguistics, film, the electronic media and literature written in English. All tours are optional and may be replaced by specified work conducted on campus. The course may be repeated for credit with the permission of the Department, but no more than six semester hours of credit in Engl 600 may be applied toward a master's degree in English.
should have majored in history at the undergraduate level. Students with undergraduate majors in fields other than history may be admitted, if their records demonstrate strong background in history and studies closely related to it. The Department may require that undergraduate deficiencies be made up in courses without graduate credit.

Other Requirements
1. Satisfactory scores in the Graduate Record Examination, including the area examination in history.
2. Two letters of recommendation from professors of history with whom the applicant has studied or from others directly familiar with his professional competence.
3. Language proficiency, where appropriate to the student’s field of concentration, may be required as a prerequisite for admission to the program. (See general language requirements under Departmental Degree Requirements below.)

Departmental Degree Requirements
The candidate for the Master of Arts degree in history must successfully meet the following requirements to be awarded the degree.
1. With thesis, thirty semester hours of approved graduate work with a grade-point average of not less than 3.00; or, alternatively, thirty-three semester hours of approved graduate work with a grade-point average of not less than 3.00.
2. Three semester hours in Hist 500 (to be taken within the first nine hours of course work).
3. Twelve semester hours in a major field of concentration, including one research seminar; such major fields presently offered are United States, Latin American, and modern European history.
4. Nine semester hours in a second field of history; minor fields presently offered are United States, Latin American, and modern European history.
5. A student’s program may include up to six semester hours in approved undergraduate courses. (See list on page 56.
6. Candidates must meet the foreign language requirement in one of the following ways:
   a. have successfully completed (before completing fifteen hours of graduate work) college courses through the intermediate level in a foreign language appropriate to his or her field of concentration.
   b. pass a proficiency examination administered by the Foreign Languages Department.
7. Pass an oral comprehensive examination administered by the history faculty covering the student’s area of concentration and one other field of history. The candidate must petition the Chairman to schedule this examination no earlier than the end of the last semester of course work, nor later than the beginning of the next regular semester. Oral comprehensive examinations are not scheduled during the summer session.
8. One of the following alternatives:
   a. Six semester hours in Hist 599 (Thesis);
   b. Nine semester hours, including one additional research seminar in either major or minor field and two elective graduate history courses, which need not be in the candidate’s fields of concentration.

Sample Program for the M.A. in History with Thesis

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Hist 500</td>
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<tr>
<td>Field of Major Concentration</td>
<td>12 (including one research seminar)</td>
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<td>(United States, Latin American, or Modern European history)</td>
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<tr>
<td>Field of Minor Concentration</td>
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<tr>
<td>(same fields as above)</td>
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<tr>
<td>Hist 599 (Thesis)</td>
<td>6</td>
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<td>Total</td>
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Sample Program for the M.A. in History without Thesis

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hist 500</td>
<td>3</td>
</tr>
<tr>
<td>Field of Major Concentration</td>
<td>12 (including one research seminar)</td>
</tr>
<tr>
<td>(United States, Latin American, or Modern European history)</td>
<td></td>
</tr>
<tr>
<td>Field of Minor Concentration</td>
<td>9</td>
</tr>
<tr>
<td>(same fields as above)</td>
<td></td>
</tr>
<tr>
<td>Additional Coursework: Research seminar</td>
<td>3</td>
</tr>
<tr>
<td>(in major or minor field) Two elective history graduate courses</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
</tr>
</tbody>
</table>

Master of Arts in Teaching (History)

The program leading to the degree of Master of Arts in Teaching is designed to help teachers extend their knowledge of bibliography and current trends in historical thinking and to improve their effectiveness in presenting history in the classroom. Narrow specialization is avoided by allowing great latitude in choice of courses. Study in the methodology of teaching social studies is included in the program.

Departmental Entrance Requirements
In addition to fulfilling the general entrance requirements, applicants for the degree of Master of Arts in Teaching should have majored in history. Applicants with undergraduate majors in fields other than history may be admitted if their records demonstrate strong background in history and studies closely related to it. The Department may require that undergraduate deficiencies be made up in courses without graduate credit.

Other Requirements
1. Satisfactory scores in the Graduate Record Examination, including the area examination in history.
2. Two letters of recommendation from professors of history with whom the applicant has studied or from others directly familiar with his professional competence.

Departmental Degree Requirements
The candidate for the Master of Arts in Teaching must successfully complete the following:
1. Twenty-four credits in history, including the three credits in Hist 500 (to be taken within the first nine hours of course work).
2. Twelve credits in education, including Educ 567 and 583.
3. A comprehensive examination administered by the faculty.

The candidate, if he intends to teach at the secondary level, must also qualify for the Virginia Collegiate Professional Certificate (or its equivalent) in history.

The Master of Arts in Teaching degree requires a minimum of 36 hours of graduate credit.
Undergraduate-Graduate Courses

A student's program may include up to six semester hours in approved undergraduate courses. The following courses, whose descriptions appear in the Undergraduate Catalog, have been approved for graduate credit.

401 Colonial America
403 Early National Period in American History
406 Civil War and Reconstruction
409 Between the Wars: The United States, 1919-1941
410 The United States Since World War II: Nation and Empire
411 Cultural and Intellectual History of the U.S. 1600-1865
412 Cultural and Intellectual History of the U.S. Since 1865
421 Intellectual and Cultural History of Europe, 1715-1848
422 Intellectual and Cultural History of Europe, 1848 to the Present
441 France Since the Revolution
443 History of Spain and Portugal
462 The Early History of the Indo-Pakistan Subcontinent
464 Modern India and Pakistan
470 Diplomacy and War in Latin America
475 History of Mexico
478 Spanish Borderlands

Graduate Courses

500 The Study and Writing of History (3)
The methodology of the historian, including techniques of research, use of documentation and other sources, development of bibliography, synthesis of material.

501 The Colonial Origins of American Society (3)
A study of the evolution of those elements in colonial society which continue to affect contemporary American institutions and patterns of behavior.

503 The Enlightenment in America (3)
A study of the Enlightenment as it was reflected in various aspects of American life in the 18th and early 19th centuries: government, science, philosophy, religion, education, and the arts. The writings of leading figures of the period will be examined and the impact of the Enlightenment on the development of the new American nation will be analyzed.

505 Attempts to Control the U.S. Westward Movement (3)
A study of attempts by the East to control the West, how and by whom control was attempted, to what extent it was effective, to what extent the need for such control existed, and in what manner the West resisted Eastern domination.

507 Interpretations in United States Diplomatic History (3)
Diplomatic problems and interpretations of diplomatic changes in the course of the development of the United States as a world power. Analyses of the administration of American foreign policy and its relationship to national interests.

509 Seminar in State and Local History (3)
An exposition of the principles and techniques of local history followed by an intensive investigation of selected aspects of the history of Fairfax County and Northern Virginia utilizing area manuscript collections.

510 Race in American Life and Thought (3)
An historical examination of the nature of American attitudes toward non-whites and of the impact of these attitudes on American life and thought. Emphasis will be placed on the origins of American views of race and their effect on our national experience.

511 512 Research Seminar in United States History (3, 3)
Prerequisite: Permission of instructor. Research in specialized topics using primary sources.

513 Topics in the American Civil War Era (3)
A joint project, undertaken by instructor and students, into the various aspects of a common topic in the Civil War era; includes emphasis on historiography and historical method.

515 Problems in American History (3)
Readings and discussion of bibliographies, interpretations, and research trends in topics selected by the instructor. A maximum of six hours may be earned.

517 Topics in Recent U.S. History, 1945 to the Present (3)
An examination of the political, social, economic and cultural forces which shaped the post-World War II American experience. Consideration of the interaction between foreign affairs and domestic politics and institutions. Alternative interpretations will be examined.

519 Seminar on Inter American Diplomacy (3)
A research seminar on geographic, political, economic, military, and other such forces that have influenced inter-American relations. Study of the special relationship between the United States and Latin America. This course may be applied toward the major or minor concentration in either U.S. or Latin American history.

520 Social Revolution in Latin America (3)
An analysis of the revolutionary forces that are challenging traditional institutions and transforming all aspects of society in contemporary Latin America. Selected countries will be studied in depth either because of their importance in the hemisphere or because they represent the outstanding problems of the region.

521, 522 Research Seminar in Latin American History (3, 3)
Prerequisite: Permission of instructor. Research in specialized topics using primary sources.

525 Problems in Latin American History (3)
An analysis of selected problems in Latin American history. Emphasis will be placed upon reading and discussion of historical interpretations and the development of bibliography. A maximum of six hours may be earned.

528 (518) Latin American Cultural and Intellectual History, Nineteenth Century (3)
Iberian background and other foreign influences; ideas of the independence leaders; mid-century Romanticism, Liberalism, and Traditionalism; secular and religious Positivism; and Marxist socialism. Intellectual developments traced in major Latin American thinkers, writers, and artists.

531, 532 Research Seminar in European History (3, 3)
Prerequisite: Permission of instructor. Research in specialized topics using primary sources.

535 Problems in European History (3)
An investigation of selected problems in the history of Europe. Readings, discussions, development of bibliographies. Where possible, primary sources will be utilized. A maximum of six hours may be earned.

537 Great Britain: Empire to Commonwealth, 1870-1970 (3)
An examination of the rise of the "new imperialism" in Great Britain from 1870 to the end of the empire and the gradual formation of the Commonwealth of Nations.

539 Western Europe 1750-1914: Aspects of the Transition from Old Regime to Modern State (3)
An analysis of Enlightenment, revolutionary, and modernizing factors in the development of western European states, 1750-1914, with emphasis on Britain, France, and Germany.

545 The Russian Revolution and the Origins of the Soviet State (3)
A study of the period between 1890 and 1924 with concentration on the sources of Bolshevism, the problems of the old regime as they led up to the revolutions of 1905 and 1917, the establishment of the new regime and its survival in an environment of foreign and civil war.

555 Problems in Asian History (3)
Problems to be investigated will be announced by the instructor of the course. The class will discuss readings and historical interpretations and will compile a comprehensive bibliography on the given theme. A maximum of six hours may be earned.

583 The Cultural History of the Islamic World (3)
Government, science, philosophy, religion, literature, arts, and architecture of the Arabs of the Umayyad and Abbasid Period, Persians of the Safavid Period, Gaznawids of Afghanistan, grand Mughals of India and Pakistan, Timurids of Central Asia, Fatamids of Egypt, Moors of Spain, and the Turks. Some important political and cultural movements in different parts of the Islamic World will also be discussed.

595 History Symposium (3)
A subject of academic and community interest pursued through discussions and lectures by distinguished guest instructors. Class meetings may be held at appropriate community locations. A maximum of six hours may be applied toward the M.A.T., and a maximum of three hours toward the M.A. degree.

598 Directed Readings (3-6)
Independent reading on a topic agreed to by a student and a faculty member.

599 Thesis (6)
Master of Science in Mathematics

The mathematics graduate program is designed to serve those who seek a Master of Science degree as well as those who wish to improve their professional skills. In order to make it convenient for working people to attend, graduate courses are offered only in late afternoon and evening hours. The Department offers a variety of courses in modern applied mathematics and operations research, in addition to the standard curriculum in pure mathematics. The courses are designed to train students in areas relevant to the needs of business, industry, and government, as well as to provide the background for advanced graduate work in the mathematical sciences and for continuing education in the teaching profession. The University has a Unitech terminal on campus with access to a CDC 6400 and an IBM 360.

Departmental Entrance Requirements

In addition to fulfilling the general entrance requirements, applicants for the master's degree in mathematics must have:
1. Three letters of recommendation.
2. Undergraduate courses in Mathematics similar to those of George Mason University: Math 315, 316—Advanced Calculus; Math 321—Abstract Algebra, Math 322—Linear Algebra. The course Intermediate Analysis and Algebra presents the highlights of these prerequisite courses and develops the skills necessary to enable a student to enter courses at the graduate level.

Departmental Degree Requirements

In addition to fulfilling the general degree requirements, the candidate for the Master of Science degree in mathematics must:
1. Complete no less than 30 hours of graduate work approved by the department with a grade average of 3.0 or better. Up to six hours toward the Masters degree in Mathematics may be chosen from certain mathematically related courses in other departments provided prior approval has been obtained from the Mathematics Department.
2. Complete Math 515 or 516 with a grade of C or better.
3. The research component of the degree (Thesis 599/ Seminar 591, 592) must be at least 3 hours but no more than 9 hours. A maximum of six hours in thesis or in seminar may be applied toward the 30 hour minimum requirement for the degree.
4. Pass a comprehensive examination.
Undergraduate-Graduate Courses
The following undergraduate course has been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

443, 444 Deterministic Models in Operations Research.

Graduate Courses
A double number separated by a comma (Math 521, 522) indicates that both courses normally constitute a sequence and that the first semester is a prerequisite to the second. The prerequisite may be waived by the Department Chairman.

501 Topics in Computer Science (1-3)
Prerequisite: No prerequisite for Part I. Part I or its equivalent is a prerequisite for Parts II and III. The course consists of three parts, each to run about five weeks. One hour of credit may be earned for each of the three parts of the course. The three parts will follow in sequence. It is the responsibility of the student to ascertain when each part begins. Credits for this course are not applicable toward the thirty semester hour requirement of the M.S. in Mathematics.
Part I: Introduction to computers. BASIC and FORTRAN languages.
Part II: Writing computer programs. Students will program and run problems suitable to their professional interests.
Part III: Advanced programming and use of packaged programs, such as Statistical Package for Social Sciences.

503, 504 Intermediate Analysis and Algebra (3, 3)
Development of the number system and linear algebra. The highlights of the calculus are reviewed and then developed in terms of metric spaces. Credits for this course are not applicable toward the thirty credit requirement of the M.S. in Mathematics, but can be counted toward the Master of Education degree.

501, 512 Complex Analysis (3, 3)

513, 514 Ordinary Differential Equations (3, 3)

515 Real Analysis I (3)

516 Real Analysis II (3)
Prerequisite: Mathematics 515 or consent of instructor. Metric spaces, Banach spaces and examples, including the Stone, Weierstrass, Riesz representation, and Ascoli theorems. General measure and integration theory, including the Lebesgue-Stieltjes integral, and product integrals. Fubini's theorem and the Radon-Nikodym theorem.

521, 522 Algebra (3, 3)
Groups, rings, fields, category theory, Galois theory.

531, 532 Point Set Topology (3, 3)
Topological spaces, connectedness, compactness, compactifications, uniform spaces, function spaces.

534 Homotopy Theory (3)
Homotopy theory including the fundamental group, higher groups and exact sequences.

536 Homology Theory (3)
Homology theory including simplicial homology theory, exact sequences, fixed point theorems.

537, 538 Non-Euclidean Geometry (3, 3)
Prerequisite: Permission of instructor. Affine, projective, hyperbolic, elliptical, and differential geometry; transformations and elementary combinatorics.

543 Mathematical Programming I (3)
Prerequisite: Math 443 or consent of instructor. Integer Programming. Cutting plane and enumeration techniques for the solution of integer linear programs. Knapsack problem, set covering and partitioning problems, matching problem. Applications to problems in the management sciences, such as capital budgeting, location of facilities, political redistricting, and scheduling problems.
Master of Arts in Psychology

The graduate program in psychology is designed to be sufficiently flexible to provide professional or research training to students with diverse interests as outlined below:

1. Persons who wish to become candidates for the doctorate in psychology at another institution after earning their master’s degree.
2. Those intending to pursue a career in research in experimental or industrial psychology upon completion of the master’s degree.
3. Those intending to pursue a career in industrial psychology upon completion of the master’s degree.
4. Persons who wish to receive professional training in child and adult clinical assessment or in counseling.

Departmental Entrance Requirements

In addition to fulfilling the general entrance requirements, applicants to the program will normally be expected to have a baccalaureate degree in psychology with at least 15 hours in psychology including statistics and a laboratory course in experimental psychology. Those with undergraduate majors in fields other than psychology are encouraged to apply and will be considered on an individual basis. Applicants may be required to make up deficiencies by taking appropriate undergraduate courses without credit. The tool requirement of tests and measurements, as needed by the individual specializations, must be met outside the total program hours.

Three letters of reference from persons familiar with the applicant’s academic work and/or his potential for professional work, as well as GRE aptitude scores, are required of all applicants for admission to the psychology program. A Miller Analogies Test score may be submitted if the applicant wishes to give further evidence of ability.

Applicants who wish to specialize in the clinical and counseling areas will be evaluated on potential clinical ability as well as on academic performance since sound interpersonal skills are an important aspect of clinical effectiveness. Applicants to these specializations should generally have an overall grade-point average of 3.0 for the last 60 undergraduate hours and a minimum of 3.25 in undergraduate psychology courses.

Because space is limited, fulfillment of the minimum requirements stated above does not guarantee admission to the graduate program in psychology. Selection will be made of the best qualified from among the applicants. An applicant’s experience, publications, or special recommendations may compensate for deficiencies.

Special Departmental Regulations

Provisional students should take 12 hours of graduate work in psychology from the courses listed below. Provisional students are expected to obtain a minimum 3.25 GPA in these courses. Their GPA will be included as a major (but not the sole) factor in determining acceptance to the degree program. The courses needed before the student requests a change to degree status are:

1. Psyc 501
2. Psyc 503, 551, or 552 (students in the experimental specialization should take 551 or 552)
3. Two courses in the area of specialization. The student should consult the department to determine the exact courses required.
Non-degree Status

Applicants who qualify for degree status, but who are not applicants for a degree at George Mason University, may be admitted in a non-degree status. Non-degree graduate status is not intended to be used as a qualifying program for degree status. While consideration may be given at a later date to the application of credits earned toward a degree program while in non-degree status, there is no assurance that such requests will be granted. If granted, however, no more than twelve semester hours of credit earned in non-degree status may be applied to a degree program.

Departmental Degree Requirements

All students must complete the general requirements for a degree. Candidates with experimental or industrial specializations must complete 30 hours of graduate credit while those in the clinical and counseling specializations must complete 41 hours of graduate credit. Requirements for each specialization are as follows:

Programs

<table>
<thead>
<tr>
<th>Programs</th>
<th>Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Specialization</td>
<td></td>
</tr>
<tr>
<td>General: Psyc 501, 502, 503, 504, 528</td>
<td>15</td>
</tr>
<tr>
<td>Assessment: Psyc 511, 515</td>
<td>8</td>
</tr>
<tr>
<td>Practicum: Psyc 550</td>
<td>6</td>
</tr>
<tr>
<td>Clinical: Adult Clinical: Psyc 512, 516</td>
<td>6</td>
</tr>
<tr>
<td>Child Clinical: Psyc 517, 522</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
</tr>
</tbody>
</table>

| Counseling Specialization |               |
| General: Psyc 501, 502, 503, 528 | 12 |
| Assessment: Psyc 511, 583 | 8 |
| Practicum: Psyc 550      | 6 |
| Counseling: Psyc 580, 582, 584, 586 | 12 |
| Electives                | 3 |
| Total                    | 41 |

| Experimental Specialization |               |
| General Experimental:      |               |
| Psyc 501 (may be waived on an individual basis), 502 | 6 |
| Methodology: Psyc 551, 552 | 6 |
| Research: Psyc 599         | 6 |
| At least 3 courses from the experimental-methodology area: Psyc 554, 556, 560, 564, 566. | 9 |
| Electives                 | 3 |
| Total                     | 30 |

| Industrial Specialization |               |
| General Experimental: Psyc 501, 502 | 6 |
| Research or Practicum: Psyc 550 or 599 | 6 |
| Three courses from the Industrial area: Psyc 430, 432, 531, 532, 534, 535 | 9 |
| One course from the area of Methodology: Psyc 503, 551, 552, 554, 556 | 3 |
| Electives                 | 6 |
| Total                     | 30 |

Since interpersonal skills are an essential aspect of clinical effectiveness, students specializing in the clinical and counseling areas are periodically evaluated by the clinical faculty on clinical skills as well as on academic performance, during their graduate work. Deficiency in these evaluations may result in their being dropped from the clinical or counseling specializations.

Undergraduate-Graduate Courses

The following undergraduate courses have been approved for graduate credit. For further information, see page 28. Course descriptions appear in the Undergraduate Catalog.

411 Infant Development
412 Perceptual and Cognitive Development
414 Behavior Disorders of Childhood
420 Clinical Methods in Psychology
421, 422 Practicum in Clinical Psychology
423 Group Psychotherapy Techniques
430 Human Factors Engineering
432 Seminar in Organizational Psychology

http://catalog.gmu.edu
Graduate Courses

To assist students in program planning, the semester in which courses are normally offered is indicated by the following abbreviations:

F  =  Fall Semester
Sp =  Spring Semester
Su =  Summer Session

Typical schedules for each specialization are available in the department office.

Students who have the equivalent background to the prerequisites listed for any graduate psychology course may apply to the instructor for permission to enter the course. A minimum of 15 undergraduate hours in psychology is a prerequisite for all psychology graduate courses. Students who have fewer hours in psychology but who have had similar courses in other disciplines should consult the department for permission to take psychology graduate courses.

501 Advanced General Psychology I (3) F, Sp  
Prerequisite: Psyc 200 and either 304, 305, 309, 311 or 316. A critical review of the major topics of experimental psychology: learning, motivation, cognition, perception (the senses), thinking and problem solving.

502 Advanced General Psychology II (3) Sp, Su  
A critical review of the major topics in personality theory, developmental and social psychology.

503 Experimental and Research Design (3) F, Sp, Su  
Prerequisite: Psyc 200 and either 304, 305, 309, 311 or 316. Advanced experimental design and the relevant statistical analytic techniques will be reviewed. Examples of experiments in various fields of psychology will be studied.

504 Biological Foundations of Psychology (3), F, Su  
Prerequisite: Psyc 371 or 372. A review of the physiological basis of normal behavior. The effects of physiological changes on behavior, such as pathological and drug-induced changes and those caused by fatigue or malnutrition. Physiological changes concomitant with psychopathology.

506 Theories of Personality (3) F  
Prerequisite: Psyc 220. A comparative review of the prevalent theories of personality with special emphasis upon their fundamental models and their similarities and differences.

507 Advanced Social Psychology (3) Sp  
General theories of social psychology will be studied in detail, including those of K. Lewin and F. Heider.

508 Theories of Development (3) F  
Prerequisite: Psyc 210 or 310. A survey of the major theories of infant and child development including the works of Piaget, Freud, Erikson, and Spitz.

511 Psychological Assessment (4) F  
Open only to degree students in psychology. Prerequisite or Co-requisite: Psyc 516, 517, or 580. Limited enrollment, permission of department required. A study of the major instruments used in clinical assessment: their nature, problems, and predictive value; administration and scoring of the major techniques for evaluation of personality and organicity; principles of interpretation of these procedures. Three lecture hours, three laboratory hours.

512 Advanced Adolescent and Adult Assessment (3) Sp  
Open only to degree students in psychology. Prerequisite or Co-requisite: Psyc 515. Limited enrollment, permission of department required. An advanced course dealing with problems of differential diagnosis of psychoses, character disorders, neuroses and brain damage; assessment problems with adolescents and suicide indicators will also be considered.

515 The Measurement of Intelligence (4) Sp  
Open only to degree students in psychology. Prerequisite: Psyc 511. Limited enrollment, permission of department required. Administration, scoring and interpretation of the major infant, child and adult intelligence tests, with emphasis on individual tests. Development of IQ tests; theories of intelligence; and current trends and developments in intellectual assessment. Three lecture hours, three laboratory hours.

516 General Psychopathology (3) F  
Prerequisite: Psyc 325. An intensive survey of the major types of psychopathological disturbances: the causes, symptoms, and dynamics of neuroses, psychoses, character disorders, and psychosomatic disorders.

517 Child Psychopathology (3) F  
Prerequisite: Psyc 210 or 310 and 325. An intensive survey of the major types of psychopathological disturbances of infancy and childhood.

522 Advanced Child Assessment (3) Sp  
Open only to degree students. Prerequisite or Co-requisite: Psyc 515. Limited enrollment, permission of department required. The problems involved in the diagnostic assessment of children with various handicapping conditions such as brain dysfunction, learning disabilities, retardation, and emotional disturbances.

528 Psychotherapy Techniques (3) F  
Open only to degree students in psychology. Prerequisite or Co-requisite: Psyc 516, 517, or 580. A survey of the major individual and group psychotherapeutic techniques currently utilized by clinical psychologists. Emphasis will be on the application of the techniques in clinical practice.

529 Behavior Therapy (3) Sp  
Prerequisite: Degree within psychology. An investigation of specific procedures for altering emotional distress and behavioral dysfunction as they are implemented within the conceptual framework of clinical psychology.

531 Industrial and Personnel Testing and Evaluation (3) F  
Prerequisite: Psyc 200 and 320. A study of the administration, scoring, and interpretation of the standard tests used by industry for the selection and assessment of personnel.

532 The Social Psychology of Industry (3) Sp  
Prerequisite: Psyc 230 or 231. The problems associated with motivation, job satisfaction, and performance of personnel. Special emphasis on the effects of organizational practices.

534 Special Problems in Human Factors Engineering (3) Sp  
Prerequisite: A graduate experimental course in psychology or Psyc 501. A seminar course reviewing fundamental problems inherent in applying psychological knowledge and techniques to the development of man-machine systems.

535 Topics in Organizational Psychology (3) F  
Prerequisite: Psyc 230 or 532 or BudAd 591. Selected topics reflecting interest in a specialized area of organizational psychology to be announced in advance. Special emphasis on the recent experimental research literature related to the selected topic.

550 Psychological Practicum (3 or 6) F, So, Su  
Enrollment limited, permission of department required. Practical experience in a clinical setting as assigned.

551 Methodology and Research (3) Sp  
Prerequisite: Psyc 200 and either 304, 305, 309, 311 or 316. A survey of statistical techniques and experiments in various fields of psychology will culminate in individual experiments exemplifying proper research methods. Advanced experimental design will be reviewed.

552 Analysis of Variance (3) F  
Prerequisite: Psyc 200 and either 304, 305, 311 or 316. The basic concepts in experimental design, the fundamental assumptions in analysis of variance, analysis of variance and covariance designs, and multiple comparison tests will be reviewed.

554 Naturalistic Methods in Psychology (3) F  
Prerequisite: Psyc 200 and either 304, 305, 309, 311 or 316. The theory and techniques involved in studying people in their natural environment will be explored. Primary emphasis will be on quasi-experimental designs and methods of systematic observation.

556 Computer Applications of Multivariate Techniques in Psychology. (3) Sp  
Prerequisite: Psyc 200 or equivalent. A survey of multivariate statistical techniques as applied to psychological research. The course emphasizes the use of computers in the analysis of complex designs and the interpretation of data resulting from computer analysis.

650 Advanced Experimental Social Psychology (3) F  
Prerequisite: Psyc 231. Study of the major trends in social psychological research with particular emphasis on the ethical and practical problems posed by human experimentation. Topics will include attitude measurement, attitude change, conformity, social perception, and small group interaction.
561 Advanced Animal Learning (3) F
Prerequisite: An experimental laboratory course in psychology. Current research in animal learning including such topics as classical and instrumental conditioning and discrimination learning will be reviewed. Theories of animal learning will also be included.

562 Human Learning and Retention (3) F
Prerequisite: A course in learning. The literature in verbal learning, transfer and retention will be reviewed with special emphasis on recent research. Topics to be studied include paired-associate and serial learning, free recall, organization in memory, concept identification, and psycholinguistics.

563 Application of Learning Principles (3) Sp
Prerequisite: Psyc 305 or 501. Detailed S-R analyses of specific study methods, intracranial stimulation in humans, selected behavior modification techniques, programmed learning, concept induction in children, and industrial applications of shaping and discrimination techniques.

564 Sensory Processes (3) F
Prerequisite: Psyc 309 or 371. An intensive exploration of the neural foundations of sensory experience, with special emphasis on the processing mechanisms at different levels of the various sensory pathways.

565 Seminar in Experimental Child Psychology (3) Sp
Prerequisite: Six hours of child psychology and a course in experimental psychology. The experimental study of child development. Seminar topics will include biogenetic factors in development, sensory processes, learning, perception, motivation, language and cognitive development.

566 Perception (3) Sp
Prerequisite: Psyc 309. Important issues related to neurophysiological, sensory, and cognitive aspects of perception will be surveyed. These topics include the general theories of Gibson, Brunswick, and the Gestaltists, and some specialized models developed in recent years, especially information-processing models.

580 Ego Psychology and Related Personality Theories (3) F
Prerequisite: Psyc 220 or 325. A review of psychoanalytic ego psychology and its extensions to other personality theories. Applications of ego psychology to adjustment problems of the normal individual. Implications of ego psychology theory for community psychology and the positive mental health movement.

582 The Theoretical Basis of Vocational & Occupational Psychology (3) Sp
A review of theories and basic research underlying vocational development and occupational choice. Current practices in occupational guidance.

583 Assessment Techniques in Counseling Psychology (4) Sp
Prerequisite: Open only to degree students. Psyc 511 and 580. Limited enrollment, permission of department required. A survey of testing and evaluation methods used in personal and vocational counseling. The laboratory offers students experience in administering, scoring, and interpreting information gathered from various psychological tests used by counseling psychologists.

584 Psychological Counseling Techniques I (3) Sp
Prerequisite: Open only to degree students. Psyc 528 and 580. Limited enrollment, permission of department required. Application of various counseling techniques generated by current dynamic and interpersonal approaches to counseling. The focus is on group counseling approaches, giving the student experience in techniques used in contemporary practice. Tapes of students’ counseling sessions are required for course credit.

585 Psychological Counseling Techniques II (3) F
Prerequisite: Open only to degree students. Psyc 528, 580 or 584. Limited enrollment, permission of department required. Application of various counseling techniques generated by current dynamic and interpersonal approaches to counseling. The focus is on individual counseling approaches, giving the student experience in techniques used in contemporary practice. Tapes of students’ counseling sessions are required for course credit.

592 Special Topics in Psychology (3)
Prerequisite: Admission to graduate program or permission of instructor. Selected topics reflecting specialized areas in psychology. Specific content will vary and will be announced before registration. May be repeated.

598 Directed Reading and Research (3)
Independent reading on a topic agreed to by a student and a faculty member. May be repeated once, except it may not be repeated for degree credit by students who also register for Psyc 599 (Thesis).

599 Thesis (3 or 6)
Master of Public Administration

The Master of Public Administration is a professional degree. It is designed to foster a professional focus toward managerial and administrative functions in the public sector. It aims, first, to provide mid-career public managers, who hold baccalaureate degrees in various disciplines, with graduate instruction which will enhance their administrative position in public sector employment must present potential public managers who seek to develop professional competence in public administration, prior to entry into public employment.

Departmental Entrance Requirements.

Applicants for enrollment as degree students in the MPA program must meet general entrance requirements. Those who have attained a middle- or upper-level administrative position in public sector employment must present a resume of full work history. Other applicants must entertain a career-oriented interest in professional public administration and possess potential for appointment to managerial positions in the public service. Such applicants may meet this requirement by presenting a record of achievement in undergraduate courses in public administration which demonstrates the potential for achieving middle- or higher-level positions in public sector employment. Applicants who have not achieved middle-level positions must present letters of recommendation from at least three persons who know the applicant, who are not related to the applicant, and who are in a position to assess the achieved or potential competence of the applicant for professional administrative work in government. Letters from supervisors, former supervisors, or undergraduate instructors would be especially appropriate.

All applications will be reviewed by a committee of the faculty of the Department of Public Affairs. While the Graduate Record Examination, or similar scholastic aptitude tests, will not be automatically required of all applicants, the Departmental Admissions Committee may require such examination where there is no clear showing of potential for administrative work or for graduate study in public administration.

This committee may specify undergraduate courses in government and/or public administration to be completed as a condition of and prior to admission to the MPA program. On all such issues the decision of the Departmental Admissions Committee shall be final.

Provisional admission may be effected. Provisional students, as defined by the admissions regulations of the Graduate School, must be admitted to degree status by satisfying the Departmental Admissions Committee within two years after their initial admission that they meet the full requirements for admission to the MPA program. Those who cannot or who fail to do so will be automatically dropped from the MPA program.

Students who are denied admission or students who are admitted to the MPA program and drop out for reasons other than academic inadequacy may reapply for admission. Persons making reapplication must meet the full University and departmental requirements. Applications for readmission will be considered only once each calendar year, except that readmissions after suspension for academic inadequacy will be considered only after the lapse of two years.

Advance to Degree Candidacy

Admission to the program as a degree student does not guarantee either departmental advancement to degree candidate status or attainment of the MPA degree.

A student must first be admitted to the MPA program by the Graduate School as a degree student. Thereafter, the student must be advanced by the Department to degree candidate status. Degree students shall petition the faculty of the Department of Public Affairs for advancement to degree candidacy. The petition shall contain evidence showing:

1. Understanding of the designated administrative tools. (See Departmental Degree Requirements, below.)
2. Successful completion of at least 18 hours of graduate study to include not less than 12 hours completed at George Mason University, including completion of PuAd 590, Research Design.
3. Probable ability to complete the remainder of the MPA program.
4. Recommendation of the student's departmental graduate research project supervisor that the student be advanced to degree candidacy.

In all cases the burden of proof for showing evidence warranting advancement to the status of degree candidate rests with the student.

Any student who has petitioned the faculty of the Department of Public Affairs for advancement to degree candidacy, and who has not been so advanced, may request reconsideration after a waiting period of one year. A student who petitions for reconsideration must show that the deficiency in the original petition has been overcome.

Departmental Degree Requirements

In addition to meeting the general requirements for graduation set by the Graduate School, a degree candidate must qualify for award of the MPA degree by completing the following:

1. A total of 45 semester hours of graduate study distributed as follows:
   a. Six core courses in Public Administration, totaling 18 semester hours, to consist of:
      501 Moral Dimensions of Public Administration (3)
      503 Political Environment of Public Management (3)
      510 Analytical Tools: Qualitative and Quantitative (3)
      520 Program and Policy Analysis (3)
      531 Leadership and Management of Public Organizations (3)
      565 Public Finance Management (3)
   At least four of the Public Administration core courses listed above must be taken at George Mason University.
   b. One level-of-government graduate course in Public Administration, for a total of three semester hours, to be selected from:
      550 Intergovernmental Relations in the United States (3)
      552 Administration in the Commonwealth of Virginia (3)
      554 Issues in Local Government Administration (3)
      558 Dynamics of the Federal Bureaucracy (3)
   c. Three graduate courses in one subject specialization to total 9 semester hours. Courses to comprise a specialization may be selected with prior approval of the graduate adviser from graduate offerings presented by an accredited college or university. Transferred courses taken according to the paragraph Transfer Credits, below, may be counted toward fulfilling this requirement if accepted by the graduate
adviser as suitable for that purpose. The following topics illustrate acceptable subject specializations:

Community Development
Criminal Justice Administration
Administrative Regulation
Educational Administration
Environmental Administration
Finance and Budget Administration
International Development Administration
Manpower and Employment Services Administration
National Security and Arms Control
Public Personnel Administration
Organizational Planning and Control
Public Health Administration
Public Works Administration
Transportation Management
Urban and Regional Planning

George Mason University will not offer through its graduate curricula more than a few complete subject specializations. Offerings will depend upon student demand and available resources.

d. Two graduate courses, for a total of six semester hours, in the design and conduct of public administration research, specifically:
   590 Research Design (3)
   591 Research Project (3)

e. Three elective graduate courses for a total of 9 semester hours.

2. By giving evidence of understanding the use of the administrative tools indicated below.

a. Written Communication. Students must show the ability to write precise, lucid, concise, and cogent English. An independent research paper will be required in each of the six core courses. Executive summaries of each of these papers along with evidence of approval by the instructor of each respective course shall be submitted as attachments to the petition for advancement to degree candidacy.

b. Statistics
c. Accounting
d. Computer Technology

Students may demonstrate understanding of statistics, accounting, and computer technology by completing an undergraduate course in each of those subjects equivalent to BuAd 201, BuAd 261-262, and BuAd 212, respectively. Each of the courses or their equivalents shall be no less than three semester hours in length and each must be passed with a grade of “C” or better. Alternately, a student may successfully complete a proficiency examination in each of these three subjects, or by satisfying the Department of Public Affairs that work experience clearly demonstrates understanding of the appropriate tool. However, semester hours earned in fulfilling tool requirements cannot be counted toward the total of 45 graduate semester hours, required in paragraph one immediately above.

3. By successfully completing a written comprehensive examination in Public Administration. It will be designed to verify the knowledge of degree candidates in the field of Public Administration. Thus, the written examination will focus upon the 36 hours of non-elective graduate work required in the MPA program curriculum with special emphasis upon the six core courses. Students who do not acquit themselves satisfactorily on the written examination may petition to take an oral examination. All examinations will be conducted by a panel of the faculty of the Department of Public Affairs. Examinations will be scheduled during the last semester of each student’s work and after completion of the research project (PuAd 591). If a student fails to pass the comprehensive examination, he may petition the departmental faculty for reexamination after the lapse of one semester. However, only one reexamination will be permitted per student. Comprehensive examinations will be scheduled once, and only once, each semester.

Graduate Student Advising

Each student who is admitted to the MPA program will be assigned to a member of the faculty of the Department of Public Affairs for graduate academic counseling and advice. Working together, the student and the faculty member will design a course of study to meet the practical career needs of the individual student. Particular attention will be given to the selection of 1) level-of-government course, 2) functional subject specialization courses, and 3) elective graduate courses. No student will be permitted to enroll for credit of graduate hours under the MPA program in other than the six core courses without the expressed written approval of the faculty adviser.

The research design (PuAd 590) and project (PuAd 591) will relate closely to the work of the student, if employed in government. If not so employed, the research design and project may be conducted in connection with a public service internship. The research project must relate closely to the career goals and career potential of the student.

Transfer and Equivalency Credit

Transfer Credits. Subject to overall University requirements, a student with prior approval of the graduate faculty adviser may transfer a maximum of six semester hours of graduate work completed at another fully accredited institution of higher learning. As appropriate, and with the prior approval of the graduate faculty adviser, these six hours may be used to fulfill any of the MPA degree requirements except PuAd 590 and PuAd 591. Such transfer credit hours must have been completed prior to admission as a degree student to the MPA program at George Mason University. In addition to all other requirements, the graduate faculty adviser in the Department of Public Affairs must find that the graduate semester hours proposed for transfer fit the career needs and the MPA study program of the individual student, as outlined under Graduate Student Advising, above. After admission as a degree student, a student with the prior approval of his graduate faculty adviser and the Graduate Dean may, when need exists, earn up to nine hours of transfer credits for graduate courses taken at other institutions.

Equivalency Credit. Students who, prior to admission to the MPA program, have had extensive professional, managerial, administrative, or technical experience in the public service and who have successfully completed programs of instruction of graduate level caliber for which no graduate academic credit was awarded, may request the Department of Public Affairs to grant graduate credits therefor. The Department may grant graduate credit for such work not to exceed nine graduate semester hours. Instructional experiences submitted for consideration as academic credit must have been completed in programs that operate at an instructional level comparable to that of a university graduate school; or have been conducted by recognized
professional societies that present courses of comparable graduate level; or have been conducted by an accredited university. Credit, if granted, will be awarded at the rate of three semester hours for each forty-five clock hours of instruction. In no case, however, may more than three credit hours be awarded for a single instructional experience (e.g., completion of one full session at the Federal Executive Institute). The graduate faculty adviser in the Department of Public Affairs must find that equivalency credits proposed for acceptance into the MPA program fit the career needs and program requirements of the individual student.

Students who petition for such equivalency credit must submit to the Department of Public Affairs the following:

1. Name, address, and affiliation of the organization that conducted the instruction.
2. Name, description, contents, and requirements of the course.
3. Name, profession, qualifications, and position of the instructor or instructors.
4. Exact dates, duration of the course, and the total hours of contact with the instructor.
5. Evaluation of the course by the student.
6. Account of the instructional tools, physical environment, and materials used during the course of instruction.
7. Authoritative evidence that the course was successfully completed. In all cases, the courses for which equivalency credit are claimed, if any, must have been completed prior to admission as a graduate student under the MPA program at George Mason University.

Limitation on Transfer and Equivalency Credits
1. A minimum of 30 graduate semester hours of credit must be earned at George Mason University toward the Master of Public Administration Degree.
2. A maximum of 15 graduate semester hours of credit may be earned toward the Master of Public Administration degree by a combination of the following:
   a. Transfer of not more than 6 graduate semester hours of credit awarded according to the paragraph headed Transfer Credit of this section; and/or
   b. By award of not more than 9 graduate semester hours of credit awarded according to the paragraph headed Equivalency Credit of this section; and/or
   c. After admission to degree status in the Master of Public Administration program by earning at one or more universities offering accredited graduate programs a maximum of 9 transfer graduate semester hours of credit not available in the graduate curricula of George Mason University. These courses must receive the approval of the student's graduate faculty adviser and the Graduate Dean prior to registration at another institution and must be relevant to the student's professional development. Students should read the paragraph of the Graduate School academic regulations titled Permission to Take a Course Elsewhere.
3. The graduate semester hours of credit resulting from options exercised under A, B, and C may not exceed 9 in categories B and C or more than 15 from any combination of the above options.

Undergraduate-Graduate Courses
No undergraduate courses may be counted for graduate credit to satisfy any requirement of this program.

Graduate Courses
501 Moral Dimensions of Public Management (3)
Prerequisite: Graduate standing or permission of the Department. An examination of the moral dimensions of such topics as individual rights, political equality, citizen participation, constitutionalism, and democratic traditions; conflicts of interest, standards of conduct and ethics, integrity, loyalty, and conflicting values of public officials; efficiency, effectiveness, and social equity of public programs. Case studies will be used.
503 The Political Environment of Public Management (3)
Prerequisite: Graduate standing or permission of the Department. An examination of the skills involved in a public manager's interaction with private groups, legislative bodies, advisory committees, the press, other administrative agencies, political executives, and other levels of government. Case studies of administrative participation in the political process of public policymaking.
510 Analytical Tools: Quantitative and Non-Quantitative (3)
Prerequisite: Graduate standing or permission of the Department. The study of selected quantitative and qualitative decision-making techniques and behavioral science methodologies; information and control systems, systems and procedures analysis, cost-benefit and cost-effectiveness methods, work measurement, legal and historical analysis as employed in public organizations.
520 Program and Policy Analysis (3)
Prerequisite: Graduate standing or permission of the Department. Study of substantive issues in the clarification of public policy goals, and estimating risks in public programs. Emphasis on the conceptualization and practical applications of policy science and other formal perspectives to policy articulation, program formulation, and program evaluation in the public sector.
531 Leadership and Management of Public Organizations (3)
Prerequisite: Graduate standing or permission of the Department. Study of managerial concepts, leadership styles, information flow, control systems, management of conflict, decision making, motivation, innovation, interpersonal negotiation, problem-solving, management tools, and management constraints in public organizations.
550 Intergovernmental Relations in the United States (3)
Prerequisite: Graduate standing or permission of the Department. An in-depth study of intergovernmental relations, with emphasis upon contemporary patterns of fiscal relations and operational grant programs.
552 Administration in the Commonwealth of Virginia (3)
Prerequisite: Graduate standing or permission of the Department. An analysis of the cultural, demographic, constitutional, and socioeconomic environment of public administration in Virginia. Governmental agencies, legislative functions, executive leadership, staff agencies, state-local relationships, intrastate regionalism, and administrative customs peculiar to Virginia.
554 Issues in Local Government Administration (3)
Prerequisite: Graduate standing or permission of the Department. An in-depth study of selected contemporary problems—such as land use, transportation, economic development, growth management, and environmental impact—in the management of counties, cities, towns, and special districts, with emphasis on local government in Virginia.
558 Dynamics of the Federal Bureaucracy (3)
Prerequisite: Graduate standing or permission of the Department. Analysis of the structures and functions of federal agencies; the agency-public-policymaker nexus; administrative roles of Congress; administrative functions of the presidency and of overhead agencies; study of selected operational problems in major departments, independent agencies, and with task forces, advisory committees, regional offices and interest groups.
565 Public Finance Management (3)
Prerequisite: Graduate standing or permission of the Department. Analysis of revenue forecasting, revenue strategy, impact of inflation, interest rates, taxation, accounting, budgeting, "back door" spending, pension funding, user charges, and other aspects of governmental finance.
571 Seminar in Public Employee Labor Relations (3)
Prerequisite: Graduate standing or permission of the Department.
An examination of public employee labor relations, including unionization, representational elections, bi-lateral policy negotiations, administration of agreements, management rights, union and membership security, the strike issue and grievance procedures, impact on public administration, and assessment of future developments.

573 Executive Personnel Management in the Public Service (3)
Prerequisite: Graduate standing or permission of the Department.
Identifying potential executives in the public service; inventorying executive personnel resources; tools used in executive selection, executive career patterns; leadership development techniques, executive compensation and benefits, executive mobility, the senior civil service proposal; development of leadership and managerial skills; evaluation of executive selection and development programs.

575 Issues in Public Personnel Administration (3)
Prerequisite: Graduate standing or permission of the Department.
Review of special personnel management programs in the public service (such as Affirmative Action, occupational safety, drug abuse and alcoholism counseling, employment of the aged, employment of the youth, retirement counseling, status of women, public pay comparability) with special attention to impact on fundamental principles of public personnel administration.

590 Research Design (3)
Prerequisite: Degree student status, completion of PuAd 510 and not less than 12 nor more than 27 hours of approved graduate credits required in this MPA program, and demonstration of proficiency in the following tools: statistics, accounting, and computer technology. To include a review of project-related background material. The Research Design must include a statement of purpose, identification of data sources, data collection strategies, possible alternate hypotheses to be tested, the framework of analysis, and a statement of anticipated results.

591 Research Project (3)
Prerequisite: Completion of PuAd 590 and permission of the Department. Student completion of an original research project related to public sector administration. On the basis of the approved Research Design each student shall prepare and defend a final report that is the result of the Research Project. The final report must be approved by the Department of Public Affairs.

Chairman, Department of Foreign Languages and Literatures: Assistant Professor Hecht

Spanish Faculty
Associate Professors: Aguera, Font, Hazera, Seward
Graduate Catalog 1977-1978
George Mason University

Master of Arts in Spanish
This program offers courses in the Spanish language, literary theory and criticism, and Spanish and Spanish-American literature, culture and civilization. The degree may be terminal for those planning to teach at the secondary and community college levels, or it can provide sound preparation for students who plan to continue toward the Ph.D. at another institution.

Departmental Entrance Requirements
In addition to fulfilling the general entrance requirements, applicants are expected to have a B.A. degree with a major in Spanish, although students with majors in related fields who know the language are encouraged to apply. The Department may require that undergraduate deficiencies be made up in courses without graduate credit.

In addition, two letters of recommendation from professors of Spanish with whom the applicant has studied or from others directly familiar with his professional competence are required.

Departmental Degree Requirements
In addition to fulfilling the general degree requirements, the candidate must meet the following departmental requirements:

1. Completion of 30 hours of course work, including Span 500 and Span 515. Six of the 30 hours may be earned in a related field (e.g., Latin American history) approved in advance by the student's faculty adviser. A list of related fields and courses is available on request. At the student's option, six hours may also be earned in Span 599 (Thesis). If a student elects not to write a thesis, his program must include at least two seminars (Span 520 and above) in which substantial research papers are required.

2. Satisfactory performance on a written comprehensive examination.

3. Reading proficiency in one other foreign language, as demonstrated in a departmentally administered examination.

Undergraduate-Graduate Courses
The following undergraduate course has been approved for graduate credit. Course description appears in the Undergraduate Catalog.

412 Special Studies in Literature

Graduate Courses
500 History of the Spanish Language (3)
The scientific study of the evolution of the Spanish Language from its origin in vulgar Latin to its present forms.

501 Applied Grammar for Teachers (3)
This course will provide an analysis of Spanish grammar to expand on its application to the teaching of language skills. The terminology and methodology for the teaching of syntax will be stressed. The Practicum will consist of intensive practice in the preparation of drills, exercises and tests to further develop teaching and understanding of grammatical structures.

505 Applied Spanish Stylistics (3)
A study of creative writing, its form and expression, through text analysis from two or more selected genres: novel, essay, drama, short story and poetry. Practice in creative writing through exercises, composition and workshops.

515 Literary Theory and Criticism (3)
Study of the nature of the literary work; analysis of contemporary critical approaches to Hispanic literature.

520 Seminar in Medieval Spanish Literature (3)
An intensive study of a major work or of a literary genre of this period. Specific content of the course will be announced before registration.

525 Seminar in Renaissance Literature (3)
Study of a literary movement or selected authors of the Spanish Renaissance.

530 Seminar in the Literature of the Golden Age (3)
Study of a literary genre or a major author of Spanish literature of the Golden Age.

535 Seminar in Don Quixote (3)
Intensive study of Don Quixote and the major critical approaches to the work.

540 Seminar in Nineteenth Century Literature (3)
Intensive study of a writer, genre, theme or movement of this period.

545 Seminar in Twentieth Century Poetry (3)
Study in depth of a major poet or poets in a particular generation or movement.

550 Seminar in Twentieth Century Drama (3)
Study of major dramatists such as those of the Generation of 1898 (e.g., Benevente) and the contemporary theatre (e.g., Buero Vallejo).

555 Seminar in Twentieth Century Prose (3)
Intensive study of a major writer, theme or movement in the novel or the essay.

560 Seminar in Spanish American Poetry (3)
Study of three or more major poets of a given period. The literary and social atmosphere of the period will be emphasized.

565 Seminar in Spanish American Drama (3)
Study of three or more playwrights who have made a major contribution to the development of the theatre. Special attention will be given to social and philosophical themes.

570 Seminar in Spanish American Prose (3)
Study of a selected theme, movement or author in the novel, short story or essay.

575 Seminar in Literature and Art (3)
A comparative analysis of a literary theme or style in relation to other media (e.g., painting, architecture, film) for an integral understanding of the arts.

580 Seminar in Literature and Society (3)
Intensive study of a literary topic, a genre or selected authors in relation to a given economic, social or political system in Spain or Latin America.

585 Seminar in Literature and Ideas (3)
A study of major ideological-philosophical themes and their artistic expression in literature.

599 Thesis (3,3)
Individual research and writing of a thesis under the guidance and supervision of a faculty member.
Additional Course Offerings

American Studies (Department of English)
Art (Department of Fine and Performing Arts)
Astronomy (Department of Physics)
Chemistry (Department of Chemistry)
French (Department of Foreign Languages and Literatures)
Geography (Department of Public Affairs)
Geology (Department of Chemistry)
German (Department of Foreign Languages and Literatures)
Government and Politics (Department of Public Affairs)
Health (Department of Health and Physical Education)
Music (Department of Fine and Performing Arts)
Nursing (Department of Nursing)
Physical Education (Department of Health and Physical Education)
Physics (Department of Physics)

In addition to the degree programs listed above, a number of departments which do not have graduate degree programs offer graduate courses (500-level and above) for elective credit and personal or professional enrichment. Supporting graduate courses, but no graduate programs, are offered in American Studies, Astronomy, Chemistry, French, Geology, Health, Nursing, Physical Education, and Physics.

There are also undergraduate courses approved for graduate credit in the following disciplines: Art, Biology, Business Administration, Chemistry, English, French, Geography, German, Government and Politics, History, Mathematics, Music, Physics, Psychology, and Spanish. A maximum of six semester hours earned in such coursework may be applied toward a graduate degree. Further information on approved undergraduate-graduate courses may be obtained from the appropriate departmental course listings and descriptions appearing in the Undergraduate Catalog.

As stated under Transfer of Credit, undergraduate courses taken at other institutions are not transferable for credit to graduate programs within George Mason University.

The Department of English offers the following course in support of other graduate programs.

502 Problems in American Culture (3)
Prerequisite: Open to all graduate students with permission of the Chairman, American Studies Committee. Selected topics of general interest featuring an interdisciplinary approach to an intensive study of various aspects of American culture. Specific content will vary from semester to semester and will be announced before registration. Seminars limited to fifteen students. Seminars may be repeated with permission of the Chairman, American Studies Committee, as their content varies.

The Department of Fine and Performing Arts offers, in support of other graduate programs, the following undergraduate courses which have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

491, 492 Advanced Studio Problems (2-4), (2-4)
The Department of Physics offers the following course in support of other graduate programs.

505 Fundamentals of Astronomy (3)
Prerequisite: Graduate standing or permission of the instructor. This course will place particular emphasis on the connection of astronomy to other disciplines as well as the recent developments in astronomy. Our planet earth, its origin and past history and the origin of life. Ancient, Renaissance and modern astronomers. Basic physics. Tools of the astronomer. The solar system, the sun, stars, our galaxy. Quasars, general relativity and cosmology. The origin, past and future of the universe. Extraterrestrial life. Recommended for teachers of general science. Three hours per week.

The Department of Foreign Languages and Literatures offers courses in support of other graduate programs.

Undergraduate-Graduate Courses
The following undergraduate courses have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

405 French Literature of the Renaissance
413 French Literature of the Seventeenth Century: Classical Drama
414 French Literature of the Seventeenth Century: Prose and Poetry
421 French Literature of the Eighteenth Century: Montesquieu and Voltaire
422 French Literature of the Eighteenth Century: Diderot and Rousseau
461 Linguistic Structure of Modern French

Graduate Courses
525 Studies in Modern French Literature (3)
Prerequisite: Graduate standing or permission of the department. Selected writers, works, themes or trends of French literature in the modern era. The specific topic will vary and will be announced before registration. All work of the course is in French. A maximum of six hours may be earned.

550, 551 Special Topics (3, 3)
Prerequisite: Graduate standing or permission of the department. A special topics course for graduate students in French. Various topics will concentrate in depth on certain aspects of French culture and literature. The specific topic, theme, or genre will vary from semester to semester and will be announced before registration. All work of the course is in French.
The Department of Public Affairs offers, in support of other graduate programs, the following undergraduate courses which have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

402 Urban Geography
403 Problems in Environmental Management
405 Transportation Geography
410 Cartography
415 Seminar in Geography
420 Seminar for Teachers of Geography

The Department of Chemistry offers the following course in support of other graduate programs.

500, 501 Selected Topics in Modern Geology (3, 3)
Prerequisite: Baccalaureate degree and permission of instructor.
This course will consist of lectures alternating with laboratory and field trip examinations of geological materials. The specific topic will vary and will be announced before registration. This course is recommended for teachers of general science and earth science.

The Department of Health and Physical Education offers the following course in support of other graduate programs.

540 Advanced Driver and Traffic Safety Education (3)
Prerequisite: Three-hour basic course in driver education; course in general safety education on college level; valid operator’s license.
Advanced course in driver education for teachers, supervisors and administrators of driver education and traffic safety programs.

The Department of Foreign Languages and Literatures offers, in support of other graduate programs, the following undergraduate courses which have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

361, 362 Literature of the Romantic Era
370 Literature From the Decline of Romanticism to 1880
405, 406 The Age of Goethe
411, 412 German Literature Since 1880
420 Linguistics of Modern German

The Department of Fine and Performing Arts offers, in support of other graduate programs, the following undergraduate courses which have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog.

445 Bibliography and Research Techniques
496 Seminar in Ethnomusicological Area Studies
The following courses in Nursing have been approved for graduate credit:

521 Components of Health Appraisal (3)  
Includes principles, skills and techniques in health appraisal of clients of all ages. Methods of recording, interpreting and auditing problem-oriented profiles provide a framework for the development of a health appraisal data base. Lecture, demonstration, and laboratory practice. 

522 Practicum in Health Appraisal (2)  
Directed clinical experiences designed to enable the student to utilize the principles, skills and techniques acquired in Nurs 521 in interactions with patients in a variety of primary health care settings. 
532, 533 Principles of Primary Health Care (4) (4)  
An integrated approach to the evaluation and management of common physical and psychosocial health care problems. Advanced skills in bio-psycho-social assessment and development of plans for health maintenance. Analysis of the scope of the nurse practitioner’s role in the provision of primary care. Lecture and case study. 

535, 536 Nurse Practitioner Practicum (4) (6)  
This practicum is a directed clinical experience performed in the primary care setting to which the student will be returning upon completion of the program. The practicum is two semesters in length and the student progressively assumes increased responsibility in the delivery of primary care. Application of principles of primary health care in clinical settings. 

541 Epidemiological and Psychosocial Perspectives in Preventive Health Care (3)  

The Department of Physics offers courses in support of other graduate programs. 

Undergraduate-Graduate Courses 

The following undergraduate courses have been approved for graduate credit. See page 28 for further information. Course descriptions appear in the Undergraduate Catalog. 

403 Introduction to Quantum Mechanics and Atomic Physics 
405 Statistical Mechanics and Thermodynamics 
410 Solid State Physics 
412 Computational Physics 
414 Introductory Nuclear Physics 

Graduate Courses 

500 Physics for High School Teachers (3)  
Prerequisite: Certification as a secondary school physics instructor or approval of department. Techniques of teaching high school physics. Introduction to modern physics with emphasis in concepts rather than mathematical formalism. Recent developments in physics. Three hours lecture. 

501 Physics Laboratory Techniques for High School Teachers (3)  
Prerequisite: Graduate standing. Theory and performance of experiments applicable to high school teaching with practical sessions on use of laboratory apparatus and computer. Recommended for high school teachers of physics. Three hours per week. 

520 The Physics of Energy and Environmental Technology (3)  
Prerequisite: B.A. or B.S. degree in natural science or mathematics, or permission of instructor. A study of the contemporary problems of energy and the environment with emphasis on the pertinent underlying principles of physics within the practical constraints of engineering and economics. The course will provide comprehensive background for those intending to pursue careers in such diverse areas as energy research and development, business administration, economics, ecology and high school science instruction. This course may be used toward specific course requirements for teacher certification in earth science. Three hours per week. 

The following courses in support of other graduate programs. 

504 History of Sport and Physical Education (3)  
An historical approach to the role of sport and physical education in the culture of ancient civilizations through the Middle Ages. 

510 Advanced Exercise Physiology (3)  
Prerequisite: Graduate Status, PhEd 450 or equivalent, or permission of instructor. Lecture, demonstration, laboratory, research, and seminar experiences whereby current information is provided and contemporary issues relative to Exercise Physiology are examined.
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Richard B. O’Keeffe, M.S.L.S., Assistant Director

Media Services
Victor Bloecher, Jr., M.A., Director

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Special Projects
Michael T. Fish, M.A.

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Donald J. Mash, Ph.D., Vice President

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Athletic Facilities
Theodore B. McCord, M.A., Coordinator

Sports Information
Vincent A. Campanella, B.A., Coordinator

Counseling and Testing
Ralph K. Roberts, Ph.D., Director

Student Life
Kenneth E. Burngarner, M.A., Associate Dean

Health Services
Carol J. Sudol, R.N., Coordinator

Housing
Ellis F. Delphin, M.A., Coordinator

Student Activities
(Vacant), Coordinator

Student Union
Donald A. Dickson, M.A., Coordinator

Student Services
Charles A. Repp, Ed.D., Associate Dean

Career Planning and Placement
Karen M. Blocher, M.A., Coordinator

Cooperative Education
Paul V. Baker, M.S., Coordinator

Financial Aid
Dianne B. Smith, M.A., Coordinator

Veterans Affairs
Carol A. Elstad, Coordinator

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The George Mason University Foundation is an autonomous organization designed to enrich programs of the University above and beyond that which can be provided by state funds. Money from the Foundation is used for faculty funding, student scholarships, endowments and grants for special research. The Foundation operates solely on private philanthropies.

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James E. Jones

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Jay W. Marsh

The Patriot Education Foundation is formed for educational, charitable and social purposes: specifically for creating the financial support essential in making George Mason University teams competitive in intercollegiate competition. All money contributed to the George Mason University Patriot Educational Foundation will be used to defray scholarship costs for student-athletics at the University. All activities of the corporation will be administered in accord with the latest National Collegiate Athletic Association regulations, policies, and procedures with no funds being used for recruitment purposes.

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The "GM" Club Foundation is formed for education, charitable and social purposes: specifically for creating lasting social and educational relationships among all wearers of the "GM" Varsity letter award; for promoting the interest and welfare of athletics and physical education programs; for encouraging participation in all sports and for serving George Mason University to enrich the physical facilities, equipment and programs associated with intramural and intercollegiate competition.

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Allen, John Ashley, Assistant Professor of Psychology, A.B., Duke University, 1963; M.S., North Carolina State University, 1969; Ph.D., North Carolina State University, 1971.

Altman, Charlotte Hall, Associate Professor of Psychology, B.A., University of Minnesota, 1929; M.A., Clark University, 1933; Ph.D., University of Chicago, 1954.


Batis, Nick Charles, Assistant Professor of Psychology, A.B. Rutgers University, 1965; M.S., Ohio University, 1972; Ph.D., Ohio University, 1974.

Baum, Richard Frederick, Assistant Professor of Business Administration. B.A., Oberlin College, 1962; M.S., University of Michigan, 1964; Ph.D., University of Michigan, 1969.

Bennett, James Thomas, Associate Professor of Economics, B.S., Case Institute of Technology, 1964; M.S., Case Institute of Technology, 1966; Ph.D., Case Western Reserve University, 1970.


Bindel, Henry Joseph, Jr., Associate Professor of Education, B.S., Eastern Kentucky University, 1950; M.A., Eastern Kentucky University, 1951; Ed.D., University of Maryland, 1971.


Black, Wilson Murray, Associate Professor of Engineering Physics Acting Chairman, Department of Physics (second semester). B.E.E., University of Virginia, 1962; M.S.E.E., Pennsylvania State University, 1967; Ph.D. Pennsylvania State University, 1971.

Bloch, Howard Ruben, Associate Professor of Economics. A.B., Duke University, 1958; Ph.D., Princeton University, 1964.

Booth, Leon Estel, Professor of History, Dean of the College of Arts and Sciences. B.S., University of Missouri, 1960; A.M., University of Missouri, 1962; Ph.D., University of Illinois, 1966.
Bowen, Larry Sylvester, Professor of Education; Chairman, Department of Education. A.B., San Francisco State College, 1959; M.S., California State College at Hayward, 1968; Ph.D., Ohio State University, 1970.


Brooks, William Ward, Assistant Professor of Business Administration. A.B., Duke University, 1959; Ph.D. University of North Carolina at Chapel Hill, 1976.

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George Mason University

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<th>Department</th>
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<tr>
<td>Admissions</td>
<td>(703) 323-2000</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>117 Finley Bldg. 2107</td>
</tr>
<tr>
<td>Graduate</td>
<td>2202 Robinson Hall 2102</td>
</tr>
<tr>
<td>Admissions Director</td>
<td>117 Finley Bldg. 2107</td>
</tr>
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<td>Affirmative Action</td>
<td>221 Finley Bldg. 2519</td>
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<td>Athletic Director</td>
<td>203 Physical Ed. Bldg. 3230</td>
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<td>Biology Department</td>
<td>2256 Robinson Hall 2181</td>
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<td>237 Student Union 2169</td>
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<td>Campus Ministry</td>
<td>229 Student Union 2160</td>
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<td>Career Planning and Placement</td>
<td>365 Student Union 2476</td>
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<td>Cashier</td>
<td>100 Finley Bldg. 2119</td>
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<td>Chemistry Department</td>
<td>240 South Bldg. 2191</td>
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<td>Comptroller</td>
<td>100 Finley Bldg. 2569</td>
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<td>Consortium</td>
<td>Tallwood (Rbts.Rd) Dean E. Brundage 2155</td>
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<td>Cooperative Education</td>
<td>354A Student Union 2535</td>
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<tr>
<td>Counseling Center</td>
<td>365 Student Union 2165</td>
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<tr>
<td>Dean of the College of Arts and Sciences</td>
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<tr>
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<tr>
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<tr>
<td>Dean of the Summer Session</td>
<td>211 Finley Bldg. 2300</td>
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<tr>
<td>Economics Department</td>
<td>3318 Robinson Hall 2421</td>
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<tr>
<td>Education Department</td>
<td>235 Thompson Hall 2220</td>
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<tr>
<td>English Department</td>
<td>132 East Bldg. 2436</td>
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<td>Extended Studies</td>
<td>205 East Bldg. 2351</td>
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<tr>
<td>Field Instruction (Social Welfare)</td>
<td>353 Student Union 2176</td>
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<tr>
<td>Financial Aid</td>
<td>211 North Campus 2450</td>
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<td>Fine and Performing Arts Department</td>
<td>231 Student Union Chuck Kellogg, Ogden (703) 323-1120</td>
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<tr>
<td>Food Service</td>
<td>3362 Robinson Hall 2405</td>
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<tr>
<td>Foreign Languages Department</td>
<td>203 Physical Ed. Bldg. 2322</td>
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<tr>
<td>General Studies Department</td>
<td>219 Thompson Hall Joseph L. Harsh 2242</td>
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<td>Library</td>
<td>207 Thompson Hall 2262</td>
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<td>Mathematics Department</td>
<td>309 Student Union 2383</td>
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<tr>
<td>Minority Affairs</td>
<td>3349 Robinson Hall Evelyn E. Cohen 2446</td>
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<td>Nursing Department</td>
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<tr>
<td>Observatory</td>
<td>Ox Road Minas Kafatos 2490</td>
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<td>Philosophy and Religion Department</td>
<td>4610 Robinson Hall William H. McFarlane 2252</td>
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<tr>
<td>Physics Department</td>
<td>255 West Bldg. 2302</td>
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<tr>
<td>President (Acting)</td>
<td>208 Finley Bldg. 2120</td>
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<tr>
<td>Psychology Department</td>
<td>4681 Robinson Hall Jeanne C. Mellinger 2203</td>
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<tr>
<td>Public Affairs Department</td>
<td>4535 Robinson Hall Robert P. Clark 2272</td>
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<tr>
<td>Registrar</td>
<td>125 East Bldg. Michael J. McDermott, Jr. 2141</td>
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<td>Security - Main Campus</td>
<td>219 North Campus 2158</td>
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<tr>
<td>Social Welfare Program</td>
<td>214 East Bldg. John L. Oppelt 2262</td>
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<td>Sociology Department</td>
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<tr>
<td>Student Affairs, Vice President</td>
<td>302 Student Union 2134</td>
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<td>Student Government</td>
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<td>Student Housing</td>
<td>4500 Pohick Ln. Ellis S. Delphin 2354</td>
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<td>Student Newspaper</td>
<td>345 Student Union 2168</td>
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<td>Student Teaching and Field Experiences (Education)</td>
<td>3334 Robinson Hall Gloria Chernay 2434</td>
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<tr>
<td>Student Union Information Desk</td>
<td>3336 Student Union Elizabeth Dagata 2374</td>
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<td>Tutorial Services</td>
<td>3336 Robinson Hall Dennis Inguagato 2367</td>
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<tr>
<td>Veterans Affairs</td>
<td>350 Student Union Carol A. Elstad (703) 323-2381</td>
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*Phone numbers are approximate and may have changed.*

For more information, visit the [Graduate Catalog 1977-1978](http://catalog.gmu.edu).