Table of Contents

Chapter I  GENERAL INFORMATION
Calendar, 4; Correspondence Directory, 7; Statement of Purpose, 8; History of George Mason, 9.

Chapter II  CAMPUS AND FACILITIES
Location, 11; Facilities, 12; Student Life, 13; Student Services, 14; Regulations, 15.

Chapter III  ENTERING THE GRADUATE PROGRAM
Nature of Announcements, 18; Classification of Graduate Students, 18; Admission, 19; Registration, 20; Fees, 21; Financial Assistance, 23; Veterans' Affairs, 25; Summer Session, 26.

Chapter IV  ACADEMIC REGULATIONS
Credit and Grades, 28; Grade Reports and Examinations, 29; Degree Requirements, 30.

Chapter V  DEPARTMENTS AND GRADUATE PROGRAMS
Biology, 33; Master of Science (Biology), 33; Business Administration, 37; Master of Business Administration, 37; Economics, 42; Master of Arts (Economics), 42; Education, 47; Master of Education Programs, 47; Master of Education in Elementary Education, 49; Master of Education in Secondary Education, 50; Master of Education in Guidance and Counseling, 51; Master of Education in School Administration, 52; Master of Education in School Supervision, 52; Master of Education in Reading, 53; History, 64; Master of Arts (History), 64; Master of Arts in Teaching (History), 65; Mathematics, 70; Master of Science (Mathematics), 70; Behavioral Sciences, 73; Master of Arts (Psychology), 73; Typical Schedules, 77.

Chapter VI  UNIVERSITY DIRECTORIES
Graduate School, 79; Rector and Visitors of the University, 81; Administration, 82; Library, 83; George Mason University Foundation, Inc., 83; Patriot Educational Foundation, Inc., 83; Alumni Association of George Mason University, 83.

INDEX, 84.
General Information

Calendar
Correspondence Directory
Statement of Purpose
History of George Mason University
GRADUATE ACADEMIC CALENDAR
1973-74

First Semester

Wednesday, August 22 .. Tuition and fees due for pre-billed students

Monday, August 27 through .. Pre-registered students pick up assigned schedules. Advising and registration for degree students who did not pre-register

Thursday, August 30–10:00 A.M. - 6:00 P.M. Advising and registration for non-degree and provisional students

Wednesday, August 29 and Thursday, August 30–10:00 A.M. - 6:00 P.M.

Friday, August 31 through .. Labor Day recess

Monday, September 3

Tuesday, September 4 .. First day of classes

Friday, September 7 .. Graduate student orientation

Tuesday, September 18 .. Last day for adding new courses

Wednesday, September 26 .. Last day for filing Winter degree applications in Registrar's Office

Monday, October 15 .. Last day for dropping a course without incurring a grade of F

Friday, November 9 .. Patriots' Day

Wednesday, November 14 .. Spring semester schedule of classes published

Tuesday, November 20 through .. Thanksgiving recess

Sunday, November 25

Monday, November 26 through .. Advising and pre-registration for Spring semester (degree students only)

Wednesday, December 5

Friday, December 7 .. Winter masters' theses due in Graduate Dean's Office

Thursday, December 13 .. Last day of classes

Friday, December 14 through .. Reading Days

Sunday, December 16

Monday, December 17 through .. Examinations

Friday, December 21

Saturday, December 22 through .. Christmas recess

Sunday, January 13
Second Semester

Wednesday, January 9 . Tuition and fees due for pre-billed students

Monday, January 14 and . Pre-registered students pick up assigned
Tuesday, January 15— schedules. Advising and registration for
10:00 A.M. - 6:00 P.M. degree students who did not pre-register

Tuesday, January 15—. Advising and registration for non-degree
10:00 A.M. - 6:00 P.M. and provisional students

Wednesday, January 16 . . . . . . First day of classes

Friday, January 18 . . . . . . . Winter commencement

Wednesday, January 30 . . . Last day for adding new courses

Wednesday, February 6 . . . Last day for filing Spring degree ap-
Tuesday, February 26 . . . Last day for dropping a course without
applications in Registrar's Office incurring a grade of F

Friday, March 1 . . Recommended filing date for financial aid appli-
cations for Summer 1974

Saturday, March 16 through . Spring recess
Sunday, March 24

Monday, April 1 . . . . . . Recommended filing date for financial aid
applications for 1974-75 session
Monday, April 1 . . . . Fall semester schedule of classes published

Thursday, April 4 through . . Advising and pre-registration for Fall
Thursday, April 11 semester 1974-75 (degree students
only)

Friday, April 12 through . Easter recess
Monday, April 15

Friday, April 19 . . . . . George Mason Day

Friday, April 26 . . . Spring masters' theses due in Graduate Dean's
Office

Wednesday, May 1 . . . Last day for filing Summer degree appli-
cations in Registrar's Office

Wednesday, May 8 . . . Last day of classes

Thursday, May 9 through . Reading days
Sunday, May 12

Monday, May 13 through . . . Examinations
Tuesday, May 21

Saturday, May 25 . . . . . Spring commencement
6 ACADEMIC CALENDAR

Summer Session 1974

*Wednesday, May 29 and........Registration for Summer Session Thursday, May 30

*Monday, June 3..........................First term begins

*Wednesday, July 3........................First term ends

*Friday, July 12 ......................Summer masters’ theses due in Graduate Dean’s Office

*Tuesday, July 9........................Second term begins

*Wednesday, August 7 ..............Second term ends

*Saturday, August 10 .................Summer commencement

* These dates are tentative. Details and final dates for the Summer Session are published in a separate bulletin.

http://catalog.gmu.edu
Correspondence Directory

Inquiries to the University should be addressed as indicated below

Admissions ............... Graduate Admissions Office
Biology Program ........... Department Chairman
Business Administration Program .. Department Chairman
Catalog .................. Graduate Admissions Office
Economics Program ........ Department Chairman
Education Programs ........ Department Chairman
Financial Aid and Placement .... Director
Financial Matters ........ Business Manager
Graduate Assistantships ...... Department Chairman
Graduate Studies ........... Graduate Dean
History Program ........... Department Chairman
Mathematics Program ....... Department Chairman
Psychology Program ......... Department Chairman
Student Affairs ............ Dean of Students
Summer Session ........... Dean of Summer Session
Transcripts ................ Recorder

GEORGE MASON UNIVERSITY, FAIRFAX, VIRGINIA 22030

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 hours vary, and it will be best to make appointments in advance.
Accreditation

George Mason University is fully accredited by the Southern Association of Colleges and Schools.

Statement of Purpose*

George Mason University is dedicated to the instruction of all qualified students, to the advancement of knowledge, and to the provision of public service especially to the communities of Northern Virginia. The major concern of the University is the student, for whom it tries to provide a free and stimulating academic atmosphere for intellectual growth. The University also provides experiences which are intended to arouse the student’s intellectual curiosity, sharpen his awareness of the possibilities of life and deepen his understanding of himself and his world. It also affords him an opportunity to prepare for a responsible role in society. The University, well aware of the rapidity of change, seeks, by constant re-examination of its methods and goals, to provide the most meaningful education possible for its students.

History of George Mason 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 University's Board of Visitors 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 of the University. The first four buildings opened September, 1964.

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

In an attempt to meet the State's long-range mandate, the College Board of Control, supported by the citizens of Alexandria, Falls Church, Arlington and Fairfax County, worked to acquire 422 additional acres. Thus by July, 1970, the size of the campus had reached 572 acres. In January, 1972, the George Mason University Foundation, Inc., acquired the former Fairfax High School property on Route 50 in Fairfax City and this facility is now known as the North Campus of the University.

The Master Plan for George Mason University, approved in 1968, provides for an enrollment of 15,000 by 1985. The University will be divided into six semi-autonomous colleges, each with about 2,500 students. Each college will have a particular academic emphasis and will contain classrooms, dormitories and a student center. Certain facilities, such as the library, research laboratories, administrative and athletic centers will be shared by all colleges.

In February, 1972, the Rector and Visitors of the University of Virginia recommended to the Governor of the Commonwealth of Virginia that George Mason College of the University of Virginia be separated from its parent institution. The enabling legislation was passed by the General Assembly, signed by the Governor, and on April 7, 1972, the former branch of the University of Virginia became an independent institution under the name of George Mason University.

Today George Mason University is planning for its future role as a major center of learning in Northern Virginia.
Campus and Facilities

Location
Facilities
Student Life
Student Services
Regulations
LOCATION

George Mason University serves commuting students from all parts of Northern Virginia and is easily accessible for Washington and suburban Maryland students as well. The City of Fairfax provides George Mason with the college-town atmosphere traditional to Virginia's institutions of higher learning; yet the campus is just 16 miles from downtown Washington.

GEORGE MASON UNIVERSITY

http://catalog.gmu.edu
THE CAMPUS. Although located just minutes away from the bustle of urban metropolitan Washington, George Mason University’s 572-acre campus retains much of the peaceful beauty of the Virginia countryside.

Nine buildings now dot the campus, located just south of the Fairfax City limits. The University’s first four buildings, opened in 1964, are linked by covered walkways and are grouped around a landscaped quadrangle.

In the last nine years several more new buildings have been added as the institution continues to expand and develop into a regional university in the Northern Virginia area. Those buildings include the first phase of the Charles Rogers Fenwick Library, a striking piece of architecture; a Lecture Hall, Thompson Hall, and a Physical Education Building. A Student Union is presently under construction.

The development of the University from 1964 to the present essentially represents the completion of College I (the College of Arts and Sciences). As George Mason grows, it will develop a series of six cluster colleges—each college with a distinctive group of instructional, social, and residential buildings.

In the development of George Mason’s campus, careful attention has been paid to the preservation of as much of the natural beauty of the area as possible—particularly the many wooded areas of the Campus. Parking areas are located on the perimeters of the campus, and traffic on campus will be held to a minimum. Buildings will be grouped mainly in the center of campus and will be connected by walks and surrounded by groves of trees and park-like recreational areas.

In late January, 1972, the George Mason University Foundation, Inc., signed an agreement with the City of Fairfax to purchase the former Fairfax High School building and some 16 acres of school property. The University is presently leasing the building from the Foundation, and the high school property has become known as the University’s North Campus. North Campus is presently serving as the temporary home of College II, the College of Professional Studies.

Construction of a student union building began in the summer of 1972. The building is scheduled to be ready for occupancy in October or November, 1973.

Ground was broken in February, 1973, for more than $6.0 million worth of building construction—a classroom-laboratory complex; an addition to Charles Roger Fenwick Library; an initial phase of a central heating and cooling plant; and a biological greenhouse.

The new classroom building, when completed, will become the permanent home of the College of Professional Studies. The library
addition is the first of six such additions tentatively scheduled to be built at two-year intervals. The first phase of the central heating and cooling plant will serve all future buildings and will be added to as additional facilities are needed. The greenhouse will serve the biological sciences. Completion dates for the projects are September, 1974, for the classroom building; May, 1974, for the library addition; June, 1974, for the heating and cooling plant; and December, 1973, for the greenhouse.

Planning is currently under way for the construction of the second phase of the student union building, the second phase of the new classroom building, and the second addition to the library.

Residence halls are included in the University's Master Plan. The University began a study in the spring of 1973 to determine the feasibility of on-campus housing and to explore alternatives to residence halls. At present, the University provides no on-campus housing for students or faculty.

LIBRARY. Library services are provided by Fenwick Library, at the southeastern corner of the main campus, and by North Campus Library, a departmental library housing business and education materials in the North Campus building. The Charles Rogers Fenwick Library, completed in 1967, is the first increment of a larger complex planned to provide library services for a rapidly expanding institution. Equipped to seat 300 people and house 70,000 volumes, the building is classically simple outside, open and modern inside, with an open stack arrangement to encourage direct access to the collection.

Students may be found during any of the ninety hours a week the library is open assuming squatter's rights at a study carrel, lounging on the floor, listening to a record, browsing in a current magazine or reading a "book" on microfiche. The collection is designed mainly to support the curricula of the University, and includes over 80,000 volumes, 100,000 microform units and 5000 pamphlets and maps. Approximately 1500 current periodicals are received. The library is also a selective depository for United States Government publications.

Services available to students and faculty at both libraries include reference help, both for specific questions and for guidance in research projects, and interlibrary loan for needed items the library does not own. Specialized bibliographic tours of the library for classes or for new students are conducted on request. There is a reserve collection for required class reading; and reader-printers for microfilm and microfiche and self-service copy machines are available.

STUDENT LIFE

For information on student life, which covers campus activities and athletics, see the Undergraduate Catalog.
STUDENT SERVICES

LIVING ACCOMMODATIONS. The Placement Office provides assistance in locating suitable housing in the vicinity of the University for students living away from home. The University has no housing facilities of its own at present.

INSURANCE. George Mason University has no provisions for rendering health services to students. It is the individual student's responsibility to arrange for needed health services. A combined hospitalization and accident policy is available to students at George Mason University. This policy provides twenty-four hour coverage including vacation periods. Applications and brochures are available in the Office of the Dean of Students.

PLACEMENT SERVICE. The Placement Office assists students in finding full-time employment upon leaving the University and assists alumni on a continuing basis. The career placement program emphasizes personal counseling, the use of occupational information, and participation in recruitment programs and career days. In addition this office helps students to find part-time and summer work.

A student may also establish a permanent credentials file which can be made available to prospective employers.

Information concerning part-time, temporary and summer jobs is available to students through listings posted on a bulletin board, and through consultation with an employment counselor.

THE UNIVERSITY COUNSELING AND PSYCHOLOGICAL SERVICES CENTER. The Center provides specialized psychological services in educational-vocational testing and counseling, and in personal adjustment counseling. These services aid the student in exploring his interests, personality, and achievement level and assist him in making the most of his opportunities for academic and personal development. The Center is staffed by professionally-trained psychologists and counselors. There is no charge for Center services.

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, as a member of the University, 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 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. The Honor Committee is to be a group of students elected from the student body whose primary and indispensable duty shall be to instill the concepts and spirit of the Honor Code within the student body. The secondary function of this group shall be to sit as a hearing committee on all alleged violations of the Code.

Entering students will participate in an orientation given by the Honor Committee. A statement of willingness to comply with the Honor System is included in the application form for admission to George Mason University.

CAMPUS MINISTRY ASSOCIATION. The Campus Ministry Association is an ecumenical group of clergy and concerned laymen of Judaeo-Christian orientation whose objective is to provide opportunities for service as well as religious, educational and social activities for the University community. It is presently sponsored by the Christian (Disciples), Christian Science, Episcopal, Lutheran, Presbyterian, Roman Catholic and United Methodist Churches. Others are cordially invited to participate. The Association draws on the resources of United Ministries to Higher Education and the Council of Churches of Greater Washington.

Chaplains are on campus daily for discussion and counseling with all members of the University community. A counseling and seminar room is available in the East building.

REGULATIONS

CONDUCT. George Mason University is a community of scholars in which the ideals of freedom of inquiry, freedom of thought, freedom of expression, and freedom of the individual are sustained. It is committed to preserving the exercise of any right guaranteed to individuals by the Constitution. However, the exercise and preservation of these freedoms and rights require a respect for the rights of all in the community to enjoy them to the same extent. Actions which deprive others of the opportunity to be heard, involve take overs of buildings that materially and substantially disrupt the educational process, incarceration of or assaults on persons, destruction of property and rifling of files, are incompatible with the nature and function of educational institutions. 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. Further amplification of the Standards of Conduct will be found in the Student Handbook.

MOTOR VEHICLES. Students who use the University parking area must register their car(s) with the University Security Office. Such registration includes proof of insurance coverage, valid operator’s license and vehicle state registration card. Each vehicle must display on the left rear bumper the decal obtained for $1.00 from the Security Office at time of registration. If more than one car in a family is to be used by the student, each car must be registered. Decals for the second and subsequent cars are furnished without charge. A copy of campus parking rules is available in the Security Office.

FIREARMS. The unauthorized possession, storage, display, or use by students 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 Campus Security Office.

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.

NON-ACADEMIC EVENTS AND PUBLICATIONS. Organizations or groups of students wishing to use University facilities for non-academic matters must obtain approval of the Dean of Students. Each request must indicate the name of the organization, the type of event for which the facility is intended and be registered in advance with the Office of the Dean of Students.

George Mason University students may publish and/or disseminate publications on campus which are not funded by the Publications Board, if such are not in violation with 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.

CHANGE OF STATUS AND ADDRESS. Each student is required to notify the Recorder 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 Recorder’s Office reserves the right to require a certified copy of documents authorizing such change. Such documents will be kept in the student’s permanent file.
Entering The Graduate Program

Nature of Announcements
Classification of Graduate Students
Admission
Registration
Fees
Financial Assistance
Veterans' Affairs
Summer Session
18 ANNOUNCEMENTS

NATURE OF ANNOUNCEMENTS

The information contained herein and any other information conveyed to students or to prospective students is subject to change at any time by the appropriate University authority.

CLASSIFICATION OF GRADUATE STUDENTS

1. A DEGREE STUDENT is a graduate student who meets all University and department requirements and is pursuing, full-time or part-time, a master's degree at George Mason University.

2. A NON-DEGREE STUDENT is a graduate student who meets admission requirements 1 and 2 in the section below and the requirements of his chosen department, and who wishes to pursue graduate study but not a master's degree. A non-degree student may apply for degree student status by petitioning his department, which will make its recommendation to the Graduate Dean. To be considered for degree status, the non-degree student must present either a satisfactory score on the Graduate Record Examination or the Admission Test for Graduate Study in Business, as appropriate, or present a grade point average of 3.25 or more on at least nine hours of graduate work. A maximum of 12 graduate credit hours earned in this status may be applied toward a degree, if approved by the student's department and the Graduate Dean. Visiting graduate students in good standing at other institutions may, with appropriate authorization, enroll as non-degree students on certifying that they intend to use their credits at an institution other than George Mason University.

3. PROVISIONAL STUDENTS are students who have been offered temporary, provisional status while attempting to meet entrance requirements. Applicants may request provisional status for any of several reasons such as a deficiency in entrance requirements, including lack of required documents, or because their academic work is not current. The provisional student may complete no more than three graduate courses in that status; on completing three graduate courses, the provisional student will be evaluated by his department and the Graduate Dean. He may then be accepted as a degree or non-degree student if he presents a satisfactory score on either the Graduate Record Examination or the Admission Test for Graduate Study in Business, as appropriate, or if he has earned an average of 3.25 or better in his graduate study. The provisional status of a student who has not demonstrated acceptable academic ability will be terminated. Graduate credits earned in this status may normally be applied toward a graduate degree, with the approval of the de-
partment concerned and the Graduate Dean. Provisional status is offered on the recommendation of the department concerned, with approval of the Graduate Dean.

ADMISSION

Application should be made to the Graduate Admissions Office of George Mason University on “Application for Graduate Program” forms which are provided upon request. A non-refundable fee of $10.00 must be attached when the completed application form is submitted.

To be assured of consideration, applications for admission to the Graduate Programs at George Mason University should be received at the University no later than: June 1 for the Fall Semester (term); April 1 for the Summer Session; December 1 for the Spring Semester (term).

In general, applicants should provide the following:

1. A bachelor’s degree from an accredited institution.
2. A grade point average of 2.75 on a 4.0 scale in the last two years of undergraduate work, or exceptional compensatory qualifications.
3. Satisfactory scores on the Graduate Record Examination or the Admission Test for Graduate Study in Business, and area examinations where specified.
4. Letters of recommendation as required by the department.

Each applicant must have an official transcript submitted of all undergraduate and graduate work previously taken. Students whose native language is not English are required to take the Test of English as a Foreign Language and achieve a satisfactory score. All applicants must meet the specific requirements listed in this catalog under the individual graduate program.

GRADUATE RECORD EXAMINATIONS. During 1973-1974 the Graduate Record Examinations will be administered on the following dates:

Testing Dates
October 27, 1973
December 8, 1973
January 19, 1974
February 23, 1974
April 27, 1974
June 15, 1974

Close of Registration
October 12, 1973
November 23, 1973
January 4, 1974
February 8, 1974
April 12, 1974
May 31, 1974

Our Counseling Center administers this test. Inquiries concerning this testing program and applications to take the tests should be
referred to our Counseling Center or to Graduate Record Examinations, Educational Testing Service, Box 944, Princeton, New Jersey, 08540, or to Graduate Record Examinations, Educational Testing Service, Box 1520, Berkeley, California, 94701.

DISCRIMINATION PROHIBITED. George Mason University complies with Title VI of the Civil Rights Act of 1964 and does not discriminate on the basis of race, color, sex, religion, or national origin.

TRANSFER OF CREDIT. With the approval of the appropriate department chairman, George Mason University will accept graduate credits earned at another university. Normally six hours of transfer credit is applicable toward a master's degree, except as specified below for the Consortium of Northern Virginia institutions. A minimum grade of B must have been earned in each course presented for transfer credit.

A maximum of 12 semester-credit hours earned at institutions which are members of the Consortium for Continuing Higher Education in Northern Virginia may be transferred to graduate degree programs at George Mason University, with approval of the Graduate Dean. As stated above, a maximum of six semester-hours may be transferred from accredited institutions not members of the Consortium. However, a maximum of 12 semester-hours from all sources prevails, i.e., 12 semester-hours from Consortium members reducible by up to six hours from non-Consortium members.

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

APPLICANTS FROM ABROAD. Applicants whose native language is not English must present evidence of proficiency in English by satisfactorily completing the Test of English as a Foreign Language. It is administered in this country and in foreign countries by the Educational Testing Service four times a year. Inquiries may be directed to our Counseling Center or to TOEFL, Educational Testing Service, Princeton, New Jersey, 08540.

MEDICAL REPORT. All students approved for admission to a regular session of the University must complete the medical form and meet all requirements contained therein.

REGISTRATION

Each registering student must complete and sign in full the Information Card. Information requested on this card is used to set up the student's master record and 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 institution 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. At course registration, degree students will be given preference over the non-degree students if the number of applicants exceeds the enrollment limits.

DELAYED REGISTRATION. Any student who fails to present himself at the time specified for registration will not be permitted to matriculate 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-registration fee of $5.00-$15.00, a 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 without charge 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.

FEES

<table>
<thead>
<tr>
<th></th>
<th>In-State Students</th>
<th>Out-of-State Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Tuition, Full-time (12 semester-hours or more) per semester</td>
<td>290.00</td>
<td>650.00</td>
</tr>
<tr>
<td>Tuition, part-time (11 semester-hours or less) per semester, per hour</td>
<td>25.00</td>
<td>55.00</td>
</tr>
<tr>
<td>Comprehensive Fee, per semester</td>
<td>30.00*</td>
<td>30.00*</td>
</tr>
<tr>
<td>Building Fee, per semester</td>
<td>25.00*</td>
<td>25.00*</td>
</tr>
<tr>
<td>Laboratory Breakage Deposit (Chemistry only)</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Diploma Fee (Graduates only)</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Special Registration Fee</td>
<td>15.00**</td>
<td>15.00**</td>
</tr>
</tbody>
</table>

* Students enrolled for six semester-hours or less are required to pay one-half the Comprehensive and Building Fees.
** Any student not in attendance at George Mason University who is preparing a dissertation under the active supervision of a member of the faculty,
CLASSIFICATION AS A VIRGINIA STUDENT. In order to be considered a Virginia student for any given semester, it is necessary that the applicant has been domiciled in the State of Virginia for at least one year immediately preceding the beginning of that semester and must have been a bona fide income taxpayer to the State of Virginia for one year immediately preceding the commencement of the semester. Any student in doubt about his status as a Virginia resident should contact the Office of Admissions.

PAYMENT OF TUITION AND FEES. Tuition and fees are due and payable at the Business Office on August 22, 1973 and January 9, 1974. No student is permitted to register for classes until satisfactory financial arrangements have been made with the Business Office (Cashier).
All students are urgently requested to make payments (whether by mail or in person) by personal check, money order or bank draft.

DEFERRED PAYMENT PLAN. A deferred payment plan is available for students whose tuition for the semester exceeds $150.00. The student must pay all fees and at least one-third of the tuition as the initial payment, with the remaining tuition payable in two equal installments. 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.

Failure to make any tuition payment on or before the due date results in a late charge of $5.00 per day, up to three days. Students who have not made final payment within three days following due date will be placed on financial probation for a period of ten calendar days. If satisfactory arrangements have not been completed by the end of the probationary period, the student will be suspended for the remainder of the semester.

DUE DATES
Second Semester: Second and third payments due February 8 and March 8, 1974.

CHECKS. Checks in payment of tuition, fees, fines or other obligations to the University should be made payable to George Mason University. Second party checks are not acceptable; pay checks from local business firms payable to the student are the exception to this rule.

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.

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 fees.
Any check returned to the University by the bank will result in a $5.00 penalty fee for the payer. Further, the student who fails to make good such check within five calendar days following notification by the Business Office will be suspended.

A student whose check is returned by the bank "Insufficient Funds" will be subject to the prescribed late penalty of $5.00 per day if he fails to make the check good on or before the deadline for the payment in question.

WITHHOLDING ACADEMIC CREDIT. Grades and transcripts will be withheld from students and former students who have failed to meet their official financial obligations. This includes traffic and library fines.

REFUNDS. A student withdrawing within five class days following registration shall have tuition and fees refunded in full; however, $10.00 will be withheld to cover the administrative cost of registration. Tuition only will be refunded on a graduated scale for subsequent voluntary withdrawals. No refunds will be made when the student withdraws involuntarily.

OTHER REQUIRED FEES

DEPOSITS. Each student enrolled in a laboratory course (in chemistry) is required to purchase from the Cashier at the time of registration one Laboratory Card priced at $5.00. This is intended to cover breakage or loss of equipment by the student. As such losses occur, the card is "punched" for the cost of the item in question. Unused portions of the card will be redeemed upon presentation to the Cashier at the end of the second semester (but no later than June 30, 1974).

TRANSCRIPT FEE. A fee of $1.00 is charged for each transcript of record when requested by the student. Payment should accompany the request.

MOTOR VEHICLE REGISTRATION FEE. All students who desire to park their vehicles on University property must register them with the University Security Office and pay a fee of $1.00 for a parking decal. (See Regulations on Motor Vehicles, p. 16).

FINANCIAL ASSISTANCE

Several forms of financial aid are available to graduate students at George Mason University, including aid from federal and state funds, as well as limited aid from other sources, such as the George Mason University Foundation, Inc., and the Emergency Loan Fund. Application forms and further information can be obtained from the Financial Aid Office, 124 East Building.
FEDERAL PROGRAMS

Final decisions by the federal government concerning policies governing the scope and extent of financial aid available to students for the 1973-74 school year are not expected until late in the summer, 1973. Based on past experience, however, the following resources should be available:

NATIONAL DIRECT STUDENT LOANS. These are low-interest, long term loans, available to qualified students according to their demonstrated financial need. Applications are handled through the Financial Aid Office, but require also the submission of a need analysis statement through the College Scholarship Service. Repayment begins nine months after completion of the graduate program. Amounts up to $2500 a year are available for graduate students. These funds are usually reserved for full-time students, although exceptions may be made for extraordinary circumstances.

COLLEGE WORK-STUDY PROGRAMS. A program under which qualified students with demonstrated financial need are placed in part-time employment related to their field of study, for which they may earn up to the total amount of their award, at the rate of $2.00 to $3.00 per hour. These jobs may be on- or off-campus, and the form of application is the same as for National Direct Student Loans.

U.S. LOAN PROGRAM FOR CUBAN STUDENTS. Cuban nationals living in the United States who are unable to receive support from sources within Cuba as a result of actions of the Cuban government, and who have demonstrated financial need, are eligible for this program. The terms are similar to those of National Direct Student Loans.

STATE LOANS AND GRANTS

The State of Virginia provides scholarships (non-repayable) and loans for qualified students with demonstrated financial need, the conditions of which correspond roughly to those of the National Direct Student Loan.

IN-SERVICE TRAINING PROGRAM FOR TEACHERS. Through the various Division Superintendents of Schools throughout the State of Virginia, a candidate may establish eligibility to receive state funds for graduate study closely related to his field of work. The candidate may use the funds to take previously approved courses at any of a number of colleges or universities throughout the State.

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% of their principal by the Authority. The educational institution the student is planning to attend analyzes the economic capacity of the family and recommends to the bank an appropriate amount of loan. Where need is apparent, and the loan is within the amount recommended by the educational institution, the federal government will absorb the interest of 7% per annum during the time the student is in school. Repayment of the loan begins nine months after the student completes his academic program. The total loan may amount to as much as $2500 per year, not to exceed $10,000 in aggregate, for graduate work.

OTHER PROGRAMS

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 through Dr. Angela Khoury, George Mason University Fulbright program advisor.

THE GEORGE MASON UNIVERSITY FOUNDATION, INC. Limited funds are available from this source for scholarships or loans for eligible students, especially those for whom other programs are inappropriate. Applications are made through the Financial Aid Office.

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.

GRADUATE ASSISTANTSHIPS. Certain funds are available to graduate students in this category. Applications are made directly to the academic department involved.

Other forms of aid are available to graduate students from a variety of sources. Extensive information about these specific programs is available through the Financial Aid Office.

VETERANS’ AFFAIRS

The Registrar's Office is the University's liaison with the Veterans Administration concerning educational benefits for veterans and their dependents. Application forms for educational benefits may be obtained from the Registrar's Office or the Veterans Administration Regional Office.

For graduate students registered during the regular session, the University considers 9 to 12 semester hours of graduate work to be
a full-time load, 8 hours to be a three-quarters load, 6 hours to be a half-time load, and 3 hours a quarter-time load. In the accelerated summer terms, lower numbers of hours are equated to full and partial loads; these rates may be obtained from the Registrar's Office.

SUMMER SESSION

Information concerning George Mason University Summer Session is presented in a separate publication which is available in March. It is anticipated that a number of graduate courses will be available every summer.
Academic Regulations

Credit and Grades

Grade Reports and Examinations

Degree Requirements
CREDIT AND GRADES

GRADES AND GRADE POINTS. A candidate for a master's degree at George Mason University is required to present a minimum of 30 hours and 90 grade points, in addition to the requirements as specified for a particular degree and by a particular department. The grade points (GP) for each semester-hour are assigned on a scale of A = 4, B = 3, C = 2, D = 1 and F = 0.

If additional work is taken beyond 30 hours, a "B" average must be maintained for all work taken for graduate credit.

ACADEMIC PROBATION. A student who, at the end of any semester,* fails to maintain a "B" average will be placed on academic probation. The student must recover to a "B" average in grade points within two semesters* of work taken at George Mason University or be liable to dismissal from the program. Both degree and non-degree students are subject to the same regulations concerning probation and dismissal.

ACADEMIC DISMISSAL. A student who falls to 9 grade points or more below a "B" average at any time during the program of study will be dismissed. For purposes of probation and dismissal, credit earned outside the University will not be counted.

SEMESTER-HOUR AND COURSE LOAD. During the regular session, a minimum full-time academic load for students is nine semester-hours. A normal full-time academic load for students is twelve semester-hours in the regular session. During the Summer Session, a normal full-time academic load for students is nine semester-hours for the entire summer session. Permission of the department chairman is required to exceed the normal load.

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

CHANGE OF COURSES. In order to drop and/or add a course, a student must obtain the written permission of the chairman of the department in which the dropped or added course is taken. Forms for this purpose may be obtained from the departmental secretaries. The last day for adding courses shall be no later than fourteen calendar days after and including the first day of classes.

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

* A semester is defined as a period from which academic credit and grade are earned and entered into the student's record.
A student who discontinues a course without proper permission will receive a grade of "F" in that course. All of the required signatures must be obtained on or before the deadlines shown in the Calendar.

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

VOLUNTARY WITHDRAWAL. An official application form to withdraw must be obtained from the Recorder's Office, and must be approved in writing by the Graduate Dean or his representative. To clear the student's record, the application must then be endorsed by the Recorder, the Librarian, 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 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 habitual idleness, or any other fault which prevents the student from fulfilling the purposes of enrollment.

PERMISSION TO TAKE A COURSE ELSEWHERE. When a student is already enrolled in 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 through department chairmen.

GRADE REPORTS AND EXAMINATIONS

GRADE REPORTS. Grade Reports are sent to the students at the end of each semester.

EXAMINATIONS. Written examinations are held at the end of each semester on the work of that semester. Courses which are predominantly laboratory work are not entitled to an examination during the regular examination period. In such courses an examination may be given in the last regularly scheduled laboratory period. 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 judgment 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 him and the instructor in charge of the examination.

DEGREE REQUIREMENTS

RESIDENCE. Normally, at least 24 semester-hours must be completed at George Mason University, except as noted under TRANSFER OF CREDIT on p. 20.

LIMITED CREDIT. Undergraduate courses taken at other institutions are not transferable for credit to graduate programs within George Mason University. Provision is made, however, for graduate students (degree or non-degree) in the University to count a limited number of hours in approved upper division undergraduate University courses toward degree requirements. The student should consult the chairman of his graduate department for specific information about the limitation on hours and the approved courses.

ACADEMIC. To qualify for a master’s degree, a candidate must be in good standing and have satisfied all departmental requirements. Specific departmental degree requirements are listed in the chapter on Departments and Graduate Programs under the respective departments. In general, the candidate must acquire a minimum of 30 semester-hours of graduate credit in an area of study, and maintain a 3.0 (B) average in all courses attempted. A comprehensive examination and a thesis may also be required by some departments.

THESIS. All candidates for degrees requiring preparation and presentation of a thesis acceptable to their supervisory committees should secure copies of “A Guide for Preparing Master’s Theses,” which will be available to them in the Office of the Dean of the Graduate School. Theses must be deposited with the proper authorities on or before the date specified in the Calendar published in the Graduate Catalog.
DEGREE REQUIREMENTS

PUBLICATION OF THESIS. The University participates in the services offered by University Microfilms, Incorporated, a corporation specializing in the reproduction of theses on microfilm. Additional information concerning this program may be obtained from the Dean of the Graduate School or from the department chairmen.

TIME LIMIT. A limit of five years from the date of first registration is set for completion of all course and thesis work for students who begin their work at George Mason University. For students who present acceptable transfer credit of six hours, remaining course and thesis work must be completed within four years from the date of first registration at George Mason University.

APPLICATION. Students who expect to complete graduation degree requirements must secure an Application for Degree form from the Recorder’s Office and return it completed to the Recorder’s Office by the date designated on the University Calendar. There is a $5.00 diploma fee which is payable at the time the student submits his 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. This ceremony represents the culmination of a phase in the formal education of the individual. Degree candidates who do not desire to participate in the formal graduation ceremonies must notify the Recorder’s Office at least twenty-four hours prior to the date and time of the ceremony.
Departments and Graduate Programs

Department of Biology
Department of Business Administration
Department of Economics
Department of Education
Department of History
Department of Mathematics
Psychology (Department of Behavioral Sciences)
DEPARTMENT OF BIOLOGY

Professor Emsley (Chairman)
Associate Professors Ernst, Wall
Assistant Professors Bradley, Holdsworth, Kelso, Mason, Shaffer

MASTER OF SCIENCE (BIOLOGY)

The prime objective of the biology graduate program is to offer to qualified students advanced knowledge of recent developments in biology. The courses are designed to appeal to two types of persons:

1. Established biology teachers or other professionals who are interested in furthering their careers. Human ecology is the central theme of this program.
2. Research-oriented students who expect to seek first employment on the strength of the Master of Science degree, or who hope to proceed to the Doctor of Philosophy degree at another institution. For these students, the areas of specialty will include systematics, physiology and genetics.

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 chairmen concerned.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general admission requirements listed on pp. 19 and 20, the applicants for graduate work in Biology must have an undergraduate degree in biology (or have taken 24 hours of biology courses) with a grade point average of 3.0 (B) or better in all biology courses taken.

For admission to candidacy for the Master of Science degree in Biology (i.e., degree status) the applicant must:

1. Provide evidence of having fulfilled the course requirements for the Bachelor of Science degree with major in biology at George Mason University, or their equivalent, namely: Inorganic and Organic Chemistry, General Biology, Cell Biology, General Genetics and Ecology.
2. Have taken the Graduate Record examination including the Biology area examination.

DEPARTMENTAL DEGREE REQUIREMENTS

In addition to fulfilling the general degree requirements listed on pp. 30, 31, the candidate for the Master of Science Degree in Biology must:

1. Acquire not less than two semester-hours of credit in Biology 591: Current Topics in Biology.
2. Complete the required 30 semester-hours of graduate work with not more than two approved upper division undergraduate courses.
3. Satisfy the departmental examiners in a comprehensive examination to be taken at the conclusion of all formal course work.

UNDERGRADUATE COURSES

The following upper division undergraduate courses have been approved for graduate credit toward the M.S. in Biology. Catalog descriptions appear in the undergraduate catalog.

342: PLANT MORPHOLOGY. [4]
344: PLANT TAXONOMY. [4]
411: ADVANCED GENETICS. [4]
412: MICROBIAL GENETICS. [4]
448: SYMBIOLOGY. [4]
462: ADVANCED CELLULAR PHYSIOLOGY. [4]
464: PLANT PHYSIOLOGY. [4]
471: EVOLUTION. [3]
473: FIELD STUDIES IN BIOLOGY. [4]
481: SELECTED TOPICS IN VERTEBRATE ZOOLOGY. [4]

GRADUATE COURSES

511: HUMAN GENETICS. [3]
Prerequisite: Biology 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.*

521: ORIGIN OF THE CULTIVATED PLANTS AND THEIR IMPACT ON MAN AND SOCIETY. [3]
Prerequisite: 8 semester-hours of Introductory Biology, one upper division botany course, Biology 311 or equivalent, and permission of instructor. The geographic centers of origin of the major crop and economic plant groups of the world, their economic and cultural significance from prehistoric to modern times, stressing classical ethnobotanical topics, such as the maize cultures of Central and South America, and modern economic and nutritional problems of food distribution, especially in underdeveloped areas of the world. *Three lecture hours.*

532: ANIMAL BEHAVIOR. [3]
Prerequisite: Biology 324 or permission of instructor. A study of the ecological aspects of animal behavior. *Three lecture hours.*

544: ADVANCED PLANT SYSTEMATICS. [3]
Prerequisite: Biology 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. Examination of freshwater streams and lakes, emphasizing their physical and chemical features and the relationship of the biota to these features. Field investigations of local streams and lakes will be conducted. *Three lecture hours, three laboratory hours.*

546: MARINE ECOLOGY. [4]
Prerequisite: A course in ecology. Examination of marine environments; the relationship of the biota to their physical and chemical features. Extended field trips will be made to points on the Chesapeake Bay and the Atlantic Ocean. *Three lecture hours, three laboratory hours.*

552: SELECTED TOPICS IN ZOOGEOGRAPHY. [3]
Prerequisites: Biology 271, 471, or permission of instructor. One three hour seminar each week. Students will prepare a seminar and a short research paper on a zoogeographic problem involving either fossil or extant organisms. Emphasis will be placed on vertebrates. *Three lecture hours.*

555: SELECTED TOPICS IN PLANT BIOLOGY. [3]
Prerequisites: 8 semester-hours of credit in Introductory Biology,
one upper division course in botany, and permission of instructor. Problems in contemporary botany will be discussed. The topic will depend upon the specialty of the instructor. *Three lecture hours.*

562: PROBLEMS IN DEVELOPMENT. [3]
Prerequisite: *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 morpho-genetic movements, differentiation, regeneration, aging and malignancy. The student becomes familiar with experimental organisms and systems of unique value in developmental biology. *Three lecture hours.*

566: COMPARATIVE PHYSIOLOGY. [4]
Prerequisite: *A course in invertebrate zoology or permission of instructor.* A comparison of physiological mechanisms in vertebrates and invertebrates. An introduction to pigmentation, bio-electricity and sensory phenomena. Emphasis will be on devising experiments, collecting data and the interpretation of results. *Three lecture hours, three laboratory 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.*

573: EVOLUTIONARY TAXONOMY. [4]
Prerequisite: *A previous course in evolution equivalent to Biology 471 or permission of instructor.* A study of modern methods and principles of animal classification, and their application to systematic problems in the laboratory. *Three lecture hours, three laboratory hours.*

591: CURRENT TOPICS IN BIOLOGY. [1]
One seminar hour each week.

599: THESIS. [6]
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.
DEPARTMENT OF BUSINESS ADMINISTRATION

Associate Professor Tongren (Chairman)
Assistant Professors Sood, Steinhauer
Lecturer Rans

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 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. degree at some other institution.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements listed on pp. 19-20, the applicants for the Master of Business Administration must:

1. Successfully pass the Admission Test for Graduate Study in Business. 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.

DEPARTMENTAL DEGREE REQUIREMENTS

A candidate must fulfill the general degree requirements listed on pp. 30-31, in addition to the following:

1. The Master's program in business administration consists of thirty-three semester hours of course work for those candidates who have completed their undergraduate work in business administration, including the following core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Statistics</td>
<td>3-6</td>
</tr>
<tr>
<td>Introductory Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Finance</td>
<td>3</td>
</tr>
<tr>
<td>Business Law</td>
<td>3-6</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Economics</td>
<td>6</td>
</tr>
</tbody>
</table>
Candidates who have completed their undergraduate work in another discipline must complete the courses listed above prior to acceptance in the MBA program. These candidates should consult an MBA advisor to determine if undergraduate work previously taken will fulfill any of the core requirements.

2. MBA CORE: Each candidate must complete the following MBA core courses unless, in the opinion of the Business Administration Department, the candidate has had previous work at the graduate level and may be granted exemption:

   BA 501 Managerial Accounting
   BA 511 Cases in Financial Administration
   BA 521 Cases in Managerial Marketing
   BA 591 Cases in Organizational Behavior
   BA 595 Business Policy

3. SPECIALTY AREAS: Each candidate must also complete at least two three-hour courses in one of the following areas:

   Financial Management
   Administrative Management
   Marketing Management and Research
   International Business
   Managerial Economics

4. A maximum of six semester hours of graduate credit will be accepted under this program for approved, undergraduate, upper level courses taken at George Mason University while the student is registered in the Master of Business Administration program.

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

6. Upon completion of 27 hours of course work, including the MBA core and specialty requirements, the candidate must successfully pass comprehensive examinations in Accounting, Finance, Marketing and Administration. These examinations will be administered by the faculty of the Department of Business Administration.

7. Upon successful completion of the comprehensive examinations, the student may elect one of the following options to fulfill the final six hours of the thirty-three hour requirement for the degree:

   (a) Thesis: A maximum of six credit hours will be permitted for writing of the thesis.
   (b) Additional course work and research: The student will take one (3 credit hour) additional course on an elective basis, and must take the Seminar in Business Research (3 credit hours).
UNDERGRADUATE COURSES

The following upper division undergraduate courses have been approved for graduate credit. Catalog descriptions appear in the undergraduate catalog.

312: DIGITAL COMPUTER CONCEPTS. [3]

412: MARKETING MANAGEMENT. [3]

433: ADVANCED FINANCIAL MANAGEMENT. [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]
A study of the theoretical and conceptual foundations for generally accepted accounting principles and practices. Current literature and theories are studied in depth to provide coverage of the basic postulates, assumptions and standards which underlie measurement criteria and practices of financial accounting. Lecture 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]

515: FEDERAL TAXATION AND BUSINESS PLANNING. [3]
An analysis of federal taxation of business enterprises, consideration is given to organization, acquisitions, mergers, spinoffs, and other divestitures, from the viewpoint of profit planning, cash flow, and tax deferment. Particular emphasis on the tax problems of the close corporation and the publicly held corporation. Lecture and discussion.

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]
Selected problems in contemporary marketing. Developing new market segments. Independent research projects and computer marketing games. Lecture, discussion, and laboratory.

541: SEMINAR: PERSONNEL ADMINISTRATION. [3]

551: QUANTITATIVE MANAGEMENT. [3]
The philosophy and practices of quantitative factors applied to business problems. Cases and problems involving multiple regression, probability theory, Markov processes, queuing theory, linear programming and sampling. Computer techniques are used in problem solutions. Lecture.

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 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: Business Administration 571
Analysis and discussion of problems in international business by use of the case method; particular emphasis on international market entry and expansion; financial considerations in the international context; and operating policies and procedures of multi-national companies. Lecture and discussion.

591: CASES IN ORGANIZATIONAL BEHAVIOR. [3]
Cases, discussion and research designed to illustrate the techniques
of applying principles of individual and group behavior toward 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 are emphasized. The procurement practices of federal, state, and local governmental agencies are examined to a lesser degree. The primary effort is to develop a full understanding of purchasing practices of private firms, within the broader context of an industrial materials management system. Case discussion; readings and research.

593: SEMINAR IN COMPARATIVE BUSINESS MANAGEMENT. [3]
Prerequisite: Business Administration 591. Comparative analysis of business practices and management systems in different countries and under different economic, social and political systems. Special attention is paid to the generic characteristics of management and of business enterprises relative to the manner in which these are modified in varying environments. Examination of the influence of these factors on the level of economic development, social structure, history and culture of a country. Emphasis on seminar reports and term paper.

595: BUSINESS POLICY. [3]
Cases, readings and discussion using the several functional areas of business in the formulation of policies and in the solving of business problems. Cases and discussion.

598: SEMINAR IN BUSINESS RESEARCH. [3]
Study of research design plans, methodologies, data collection and analyses and their application to research projects in the field of business administration. Data sources, selection of suitable projects for study, collection of data, analyses and findings, and reporting style and format are explored. Each student is required to prepare a written report covering an approved research topic in the area of his major.

599: THESIS. [6]
DEPARTMENT OF ECONOMICS

Associate Professors Bloch, Hayn, Phillips
Assistant Professors Chung, Solomon, Weist
Lecturers Cassidy, Schwer
(New program effective September, 1973)

MASTER OF ARTS (ECONOMICS)

This program is designed to provide students with the theoretical fundamentals of economics and with specialized knowledge of the various fields offered. The program is designed to serve:

1. Students with recent baccalaureate degrees who will be qualified to obtain 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 will be able 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 listed on pp. 19-20, 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. Three letters of reference from professors with whom the applicant has studied or from other persons directly familiar with his professional competence are also required. The department may also require that undergraduate deficiencies be made up by completion of appropriate remedial work taken without graduate credit.

DEPARTMENTAL DEGREE REQUIREMENTS

The student must meet all the general requirements for a degree as listed on pp. 30-31. In addition, the Master's program in economics requires thirty 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 at least six semester hours of graduate theory. Those electing the non-thesis option are required to take Economics 530, Econometrics (I), a three credit hour course. In special circumstances the department chairman may allow a student to apply up to six semester credits toward the required thirty credits.
from electives chosen from graduate courses in business administration and government.

GRADUATE COURSES

501: MICROECONOMIC THEORY. [3]
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.

502: MACROECONOMIC THEORY. [3]
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.

503: WELFARE ECONOMICS. [3]
The topics covered include Pareto optimality, social welfare functions, the voting paradox, indivisibilities, consumer surplus, output and price policy in public enterprise. Qualifications of the basic welfare theorem caused by noncompetitive market structures, external economies and diseconomies and secondary constraints. As time permits, Kaldor, Hicks, Scitovsky, Arrow, Little, Bergson and Samuelson will be discussed.

504: MACRODYNAMIC ECONOMICS AND THE ECONOMICS OF TECHNICAL CHANGE. [3]
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.

507: MONETARY THEORY AND POLICY. [3]
Theory of money, financial assets, and economic activity. 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.

510: PUBLIC FINANCE. [3]
Theoretical and institutional analysis of government expenditures, taxation, debt management and intergovernmental fiscal relations. Allocative and distributional effects of alternative tax and subsidy techniques. Principles of benefit-cost and cost effectiveness analysis for government decisions.
511: SEMINAR IN MONETARY THEORY AND POLICY. [3]
Selected topics of current interest will be discussed.

512: RESOURCE ECONOMICS. [3]
Introduction to benefit-cost and cost effectiveness analysis in the context of resource management in the public sector. Particular attention will be paid to 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. The problems of uncertainty, time horizon considerations, joint costs, multiple benefits, non-quantifiable benefits and costs will be discussed.

514: LABOR ECONOMICS. [3]
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.

515: SEMINAR IN LABOR ECONOMICS. [3]
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.

518: ECONOMIC DEVELOPMENT. [3]
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.

519: SEMINAR ON LATIN AMERICAN DEVELOPMENT. [3]
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.

524: INDUSTRIAL ORGANIZATION AND PUBLIC POLICY. [3]
525: SEMINAR IN INDUSTRIAL ORGANIZATION. [3]
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.

530: ECONOMETRICS (I). [3]
Techniques of estimating relationships among economic variables. Introduction to multiple regression and problems associated with the single equation model—autocorrelation, multicollinearity, and heteroscedasticity.

531: ECONOMETRICS (II). [3]
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.

532: MATHEMATICAL ECONOMICS. [3]

535: INTERNATIONAL TRADE AND FINANCE. [3]
The international mechanism of adjustment: price, exchange rates, income changes, and direct as well as indirect controls. The theory of trade: comparative costs and the 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.

540: ADVANCED REGIONAL AND URBAN ECONOMICS [3]
Location theory and spatial distribution of economic activity; application of analytic methods such as economic base theory, input-output techniques, and industrial complex analysis to problems of regional and urban development, environmental quality, and natural resource management. Analysis of government policies toward urban renewal, transportation, land-use patterns, pollution and other problems as time permits.

545: HISTORY OF ECONOMIC THOUGHT. [3]
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.
598: DIRECTED READING AND RESEARCH. [3]

599: THESIS. [3-6]
Those students who take Economics 598 and then elect the thesis option will receive three credits for Economics 599 upon completion of the thesis. Those students who do not take Economics 598 will receive six credits for Economics 599 upon completion of the thesis.
DEPARTMENT OF EDUCATION

Professors Snyder (Chairman), Azarowicz, Eaves, Joy, Schindler
Associate Professors Bindel, Edgemon, Ellert, Evans, Gilstrap, Hill,
Kilby, Martin, Smith.
Assistant Professors Austin, Carroll, Dzama, Gedney, Gray, Keller,
Krotee, Major, Moretz, Schuchman, Shelton, Snoddy, Wilson
Instructor Bloeker
Lecturers Bouey-Yates, Bowen, Chisholm, Fox, Montebello, Sigal,
Sprague, Stodghill, Tankard, Thoms

MASTER OF EDUCATION PROGRAMS

These programs are designed for:

1. College graduates who wish to teach in elementary and secondary schools
2. Elementary and secondary school teachers who wish to improve their competence
3. Elementary and secondary school teachers who wish to qualify for school administration
4. Elementary and secondary school teachers who wish to qualify for school supervision
5. Elementary and secondary school teachers who wish to qualify in the field of guidance and counseling
6. Elementary and secondary school teachers who wish to qualify in the field of reading.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements listed on pp. 19-20, the applicant must:

1. Possess a temperament appropriate for the teacher as required by Virginia Certification Regulations.
2. Meet specific requirements as follows:
   a. College graduates who wish to teach:
      Submit recommendations by three persons qualified to judge professional promise.
   b. Elementary and secondary school teachers who wish to improve their competence:
      Submit recommendations by three persons qualified to judge professional competence.
   c. School personnel who wish to qualify for school administration:
Have two years of successful teaching experience, a portion of which must be at the level where qualification is desired. 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.

d. School personnel who wish to qualify for school supervision:
Have completed two years of successful teaching experience, a portion of which must be at the level where qualification is desired. 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.

e. School personnel who wish to qualify in guidance and counseling:
Have completed two years of successful teaching experience, a portion of which must be at the level where qualification is desired. 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. Have the personal characteristics required. An interview is required.

f. School personnel who wish to qualify in reading:
Have completed two years of successful teaching experience. 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.

Students admitted provisionally must, in addition to meeting Graduate School requirements, complete one course in each of areas I, II, and III of the sample programs to be considered for admission either as a degree or non-degree student.

DEPARTMENTAL DEGREE REQUIREMENTS

In addition to fulfilling the general degree requirements listed on pp. 30-31, the candidate must:

1. If without course work in education, have completed nine semester hours of undergraduate professional education, and the requirements for the Virginia Collegiate Professional Certificate or its equivalent.

2. Complete the graduate program in which enrolled.

3. Pass a comprehensive examination covering the graduate program in which enrolled. The comprehensive examinations are given three times a year. Applications must be received in the Education office by November 1, April 15, and June 15.
for the fall, spring and summer terms respectively. Only students who have completed all course work or who are in the last semester of a graduate program may apply. A booklet of instructions and a bibliography are available in the Department of Education office.

The following program outlines are presented in order to give a prospective applicant an idea of the type of program he might pursue. It is emphasized that there is considerable flexibility when a program is designed for an individual student.

Students having an interest in research may elect a program requiring the preparation of a thesis. Students electing a thesis must complete a Master of Education degree program, and must include within the requirements for that program, the following courses: Education 590, 591 and 593. Students are not limited to the elective courses shown but may choose other unrestricted courses. Each student should develop a program in consultation with his advisor to meet his own special needs.

MASTER OF EDUCATION IN ELEMENTARY EDUCATION

A. PREPARATION FOR EARLY CHILDHOOD (NK-3) OR ELEMENTARY TEACHING (4-7)

This program is designed to prepare holders of the bachelor's degree for professional certification as teachers in grades NK-3 or 4-7. Information concerning the requirements for the Virginia Collegiate Professional Certificate may be found in the Bulletin of the Undergraduate Colleges. To complete this program the student must correct any deficiencies in undergraduate work and complete the graduate work included in the program.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Historical, Philosophical, and Social Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 501, 502, 503, 505</td>
<td></td>
</tr>
<tr>
<td>II. Psychological Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 525, 526</td>
<td></td>
</tr>
<tr>
<td>III. Research:</td>
<td>3</td>
</tr>
<tr>
<td>Education 590</td>
<td></td>
</tr>
<tr>
<td>IV. Area of Specialization:</td>
<td>18</td>
</tr>
<tr>
<td>Education 401, 403, 407, 419, 575 or Education 402, 404, 408, 420, 576</td>
<td></td>
</tr>
<tr>
<td>V. Electives:</td>
<td>3</td>
</tr>
<tr>
<td>Education 582 or other approved courses</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
B. EARLY CHILDHOOD AND ELEMENTARY TEACHING 
FOR CERTIFIED TEACHERS

This program 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.

Semester Hours

I. Historical, Philosophical, and Social Foundations: 
   Education 501, 502, 503, 505 .............................. 3

II. Psychological Foundations: 
    Education 525, 526 ........................................... 3

III. Research: 
    Education 590 ................................................. 3

IV. Area of Specialization ....................................... 15
   1. Education 550, 558, 559, 561, 562, 563, 564, 
      565, or 625 ................................................. 6
   2. Education 582 ................................................. 3
   3. In one of the following areas: ................................ 6
      a. Early Childhood and Elementary Teaching 
         Education 558, 559, 561, 562, 563 or 564
      b. Historical and Philosophical Foundations 
         501, 502, 503, 505, 509
      c. Psychological Foundations 
         Education 525, 526, 527, 531, 533, 538
      d. Reading 
         Education 559, 601, 605, 607
      e. Educational Technology 
         Education 625, 565
      f. Supervision 
         Education 552 and 554

V. Electives ....................................................... 6
   May be in other disciplines

Total 30

MASTER OF EDUCATION IN 
SECONDARY EDUCATION

A. PREPARATION FOR SECONDARY SCHOOL TEACHING

This program is designed to prepare holders of the bachelor's 
degree for professional certification as secondary school teachers, grades 7-12, in specific subject areas. Information concerning the requirements for the Virginia Collegiate Professional Certificate may be found in the Bulletin of the Undergraduate Colleges. To complete this program the student must correct
any deficiencies in undergraduate work and complete the graduate work included in the program.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>

I. Historical, Philosophical and Social Foundations:  
Education 501, 502, 503, 505  

II. Psychological Foundations:  
Education 525, 526  

III. Research:  
Education 590  

IV. Area of Specialization:  
Education 416, 421, 577  

V. Electives:  
Must include at least 6 semester hours in the major teaching field or in a discipline related to it, Ed. 583 or 566 or 67, 68, 69 or as approved by the department.

Total 30

B. SECONDARY SCHOOL TEACHING FOR CERTIFIED TEACHERS:

This program 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.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>

I. Historical, Philosophical and Psychological Foundations:  
Education 501, 502, 503 or 505  

II. Psychological Foundations:  
Education 525 or 526  

III. Research:  
Education 590  

IV. Area of Specialization:  
Education 583 and Education 551, 565, 567, 568, or 569  

V. Electives:  
Must include at least nine semester hours in the teaching field or in a discipline related to it  

Total 30


This program is designed to enable qualified individuals to become guidance counselors at the elementary or secondary school level.
### MASTERS OF EDUCATION IN ADMINISTRATION

This program is designed to enable qualified individuals to become school administrators at the elementary or secondary school level.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Historical, Social and Philosophical Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 501, 502, 503, 505</td>
<td></td>
</tr>
<tr>
<td>II. Psychological Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 525 or 526</td>
<td></td>
</tr>
<tr>
<td>III. Research:</td>
<td>3</td>
</tr>
<tr>
<td>Education 590</td>
<td></td>
</tr>
<tr>
<td>IV. Area of Specialization</td>
<td>21</td>
</tr>
<tr>
<td>A. Education 538 or 539, 636, 637, 638, 639, 536</td>
<td></td>
</tr>
<tr>
<td>B. Education 531, 550 or 551, and 591</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### MASTERS OF EDUCATION IN SCHOOL SUPERVISION

This program is designed to enable qualified individuals to become school supervisors at the elementary or secondary school level.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Historical, Philosophical, and Social Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 501, 502, 503 or 505</td>
<td></td>
</tr>
<tr>
<td>II. Psychological Foundations:</td>
<td>3</td>
</tr>
<tr>
<td>Education 525 or 526</td>
<td></td>
</tr>
<tr>
<td>III. Research:</td>
<td>3</td>
</tr>
<tr>
<td>Education 590</td>
<td></td>
</tr>
<tr>
<td>IV. Area of Specialization</td>
<td>21</td>
</tr>
<tr>
<td>Education 550 or 551; 552 or 553; 555 or 556; Education 507, 570 and 580 or 581</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
MASTER OF EDUCATION
IN READING

This program is designed to permit qualified individuals to become reading specialists at the elementary or secondary school level.

Semester
Hours

I. Historical, Philosophical, and Social Foundations:
   Education 501, 502, 503 or 505 ..................... 3
II. Psychological Foundations:
   Education 525 or 526 .................................. 3
III. Research:
   Education 590 and 531 or 591 ......................... 6
IV. Area of Specialization:
   Education 559, 601, 602, 603, 604, 605, 607, 608 or 609 .... 21

Total 33

UNDERGRADUATE COURSES

The following upper division undergraduate courses may be taken for graduate credit as part of an approved program of a graduate student. Not more than six semester-hours of credit in these courses may be counted toward the Master of Education degree in other than preparation for teaching programs. In preparation for teaching programs twelve semester-hours may be counted. Additional work will be required of graduate students taking these courses. Catalog descriptions appear in the undergraduate catalog.

401: TEACHING METHODS IN EARLY CHILDHOOD. [3]
402: TEACHING METHODS IN THE INTERMEDIATE GRADES. [3]
403: DEVELOPMENTAL READING IN EARLY CHILDHOOD. [3]
404: DEVELOPMENTAL READING IN THE INTERMEDIATE GRADES. [3]
407: DIAGNOSTIC READING AND LANGUAGE ARTS IN EARLY CHILDHOOD. [3]
408: DIAGNOSTIC READING AND LANGUAGE ARTS IN THE INTERMEDIATE GRADES. [3]
416: TEACHING METHODS IN THE SECONDARY SCHOOLS. [3]
419: TEACHING SCIENCE IN EARLY CHILDHOOD. [3]
420: TEACHING OF SCIENCE IN THE INTERMEDIATE GRADES. [3]

421: INSTRUCTIONAL MEDIA. [3]

GRADUATE COURSES

501: HISTORY OF EDUCATION IN WESTERN CULTURE. [3]
Prerequisite: A basic course in foundations of Education. A critical historical analysis of old world backgrounds influencing education in the United States.

502: HISTORY OF EDUCATION IN AMERICA. [3]
Prerequisite: A basic course in foundations of Education. An examination of the development of the American educational system with emphasis on the areas of aims and purposes; curriculum; methods and facilities; staffing, organization, administration, financing and control, equality of opportunity, adaptability to changing times, and church-state relationships.

503: PHILOSOPHY OF EDUCATION. [3]
Prerequisite: A basic course in foundations of Education. A critical examination of selected ancient and contemporary philosophies and their impact upon educational thought and practice. A study of the controversial aspects of various philosophies of education.

505: SOCIAL PROBLEMS IN EDUCATION. [3]
Prerequisite: A basic course in foundations of Education. 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]
Prerequisite: Collegiate Professional Certificate or equivalent. The principles, philosophy, practices, and agencies involved in developing and maintaining desirable relationships between schools and the communities they serve.

509: PROFESSIONAL ETHICS, RELATIONSHIPS, AND NEGOTIATIONS. [3]
Prerequisite: Collegiate Professional Certificate or equivalent. An exploration of the philosophical, sociological, economic, and psychological bases for professional ethics, relationships, and negotiations.

525: ADVANCED HUMAN GROWTH AND DEVELOPMENT. [3]
Prerequisite: A basic course in Human Growth and Development or Educational Psychology. An advanced course relating to human
development throughout the life span including the development of the child through education, the unfolding of human abilities in terms of personal adjustment and achievement. Emphasis is placed on development through adolescence.

526: ADVANCED EDUCATIONAL PSYCHOLOGY. [3]
Prerequisite: A basic course in Educational Psychology or Human Growth and Development. An advanced course relating to learning theory, motivation, personality development, social and emotional behavior and student attitudes.

527: EVALUATION OF STUDENT PROGRESS. [3]
Prerequisite: A basic course in Educational Psychology or Human Growth and Development. 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.

531: EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT. [3]
Prerequisite: Collegiate Professional Certificate. Techniques and principles used in the construction, administration and quantification of human judgment for evaluation purposes; interpretations of standardized tests of personality and ability.

533: MENTAL HEALTH IN THE SCHOOL PROGRAM. [3]
Prerequisite: A basic course in Educational Psychology or Human Growth and Development. 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]
Prerequisites: Admission to the Graduate Program in Guidance and Counseling, Education 531 and 538 or 539. Detailed study of individual analysis and appraisal techniques for Guidance and Counseling. Development of systematic case studies.

538: THEORIES, PRINCIPLES AND PRACTICES OF GUIDANCE IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. An introduction to the philosophy, theory, and principles of guidance in the elementary school. Included are the history, present practices, and emerging trends.

539: THEORY, PRINCIPLES AND PRACTICES OF GUIDANCE IN THE SECONDARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. An introduction to the philosophy, theory, and principles of guidance in the secondary school. Included are the history, present practices and emerging trends.
550: CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. Development of the curriculum in the elementary school, 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]
Prerequisite: Collegiate Professional Certificate. 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: SUPERVISION OF ELEMENTARY SCHOOL INSTRUCTION. [3]
Prerequisites: Teaching experience and Education 550. The nature and purposes of supervision, recent trends in theory and practice, teacher participation in organization and planning, techniques and practices of supervision, and the training of supervisors.

553: SUPERVISION OF SECONDARY SCHOOL INSTRUCTION. [3]
Prerequisites: Teaching experience and Education 551. The nature and purpose of supervision, recent trends in theory and practice, teacher participation in organization and planning, techniques and practices of supervision, and the training of supervisors.

554: EVALUATION OF INSTRUCTION. [3]
Prerequisites: Education 552 or 553. The techniques and devices employed in the evaluation of instruction, educational programs, schools, and school systems. Trends in the development of evaluation techniques. Accreditation and self-study techniques.

555: ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION. [3]
Prerequisites: Admission to Graduate Program in School Supervision or School Administration, and Education 550. The organization and administration of the elementary school with emphasis on the principalship. Responsibilities for educational leadership, curriculum development, public relations, personnel relationships, school business management, and the school plant.

556: SECONDARY SCHOOL ORGANIZATION AND ADMINISTRATION. [3]
Prerequisites: Admission to Graduate Program in School Administration or School Supervision, and Education 551. The organization and administration of the secondary school with emphasis on the principalship. Responsibilities for educational leadership, curriculum development, public relations, personnel relationships, school business management, and the school plant.
557: PERSONNEL ADMINISTRATION. [3]
Prerequisites: Admission to Graduate Program in School Administration or School Supervision, and Education 555 or 556. The organization of personnel services, the development of policies governing selection, orientation, placement, remuneration, and transfer and separation of personnel. The maintenance of morale among professional and non-professional personnel.

558: 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 READING IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: A basic course in teaching reading in the elementary school. An advanced course in the principles, techniques, and materials for developmental reading programs in the elementary grades. Emphasis is placed upon comprehension skills, vocabulary skills, study skills, innovative programs, tests and testing, differentiated instruction, and the implications of research.

561: LITERATURE IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: A basic course in children's literature. An advanced course relating to the historical development of children's literature, types, principles of critical analysis, study of classes in children's literature, and a survey of recent literature. Study of changes in the reading habits of children. Techniques of presentation to children to include the use of media.

562: MUSIC IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: A course in music for the elementary school or permission of the instructor. An advanced course for elementary teachers in the principles and practices of music for children. Includes fundamentals of music, classroom applications, musical creativity, intelligent listening, historical aspects, and current publications and materials.

563: SCIENCE IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: A basic course in teaching science or permission of the instructor. An advanced course in the subject matter, the methodology, the materials involved in teaching of physics and chemistry to elementary school children. Emphasis will be given to the knowledge necessary to understand present day concepts in these areas.

564: ART IN THE ELEMENTARY SCHOOL. [3]
Prerequisite: A basic course in art for the elementary school or permission of the instructor. 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 field.

566: INSTRUCTIONAL PROBLEMS IN SECONDARY EDUCATION. [3]
Prerequisites: Collegiate Professional Certificate and teaching experience. An advanced course designed to develop competence in new and innovative techniques in teaching and the associated problems.

567: SOCIAL STUDIES IN THE SECONDARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. An advanced course in the methods, materials, content, and organization of social studies programs in the secondary schools.

568: SCIENCE AND MATHEMATICS IN THE SECONDARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. An advanced course in the methods, materials, content, and organization of science and mathematics programs in the secondary schools.

569: LANGUAGE ARTS IN THE SECONDARY SCHOOL. [3]
Prerequisite: Collegiate Professional Certificate. An advanced course in the methods, materials, content, and organization of Language Arts programs in the secondary schools.

570: SCHOOL LAW. [3]
Prerequisite: Collegiate Professional Certificate. This course is designed to provide the background in school law required by school administrators, supervisors, counselors, and others requiring familiarity with school law in general and with Virginia school law in particular.

575: INTERNSHIP IN EARLY CHILDHOOD TEACHING. [6]
Prerequisite: Admission to Program in Preparation for Elementary School Teaching and certification requirements except for internship. A full time program of at least ten weeks' duration in a public school, involving the study of pupils, observation of teaching, preparation of instructional materials, teaching in grades 1-3 and in either kindergarten or nursery school, and participation in other school activities as required or needed. Attendance at periodic seminars is required.
576: INTERNSHIP IN INTERMEDIATE GRADE TEACHING. [6]
Prerequisites: Admission to Program in Preparation for Elementary School Teaching and certification requirements except for Internship. A full time program of at least ten weeks' duration in a public school, involving the study of pupils, observation of teaching, preparation of instructional materials, teaching in grades 4-6, and participation in other school activities as required or needed. Attendance at periodic seminars is required.

577: INTERNSHIP IN SECONDARY SCHOOL TEACHING. [6]
Prerequisites: Admission to Program in Preparation for Secondary School Teaching and certification requirements except for Internship. A full time program of at least ten weeks' duration in a public school, involving the study of pupils, observation of teaching, preparation of instructional materials, teaching in grades 7-12, and participation in other school activities as required or needed. Attendance at periodic seminars is required.

578: PRACTICUM IN ELEMENTARY SCHOOL SUPERVISION. [2-6]
Prerequisites: Admission to and completion of Graduate Program in Supervision except for Practicum. A program of supervisory practice and participation in school activities conducted in a public school system at a level consistent with the qualification desired. A total of six semester hours is normally required.

579: PRACTICUM IN SECONDARY SCHOOL SUPERVISION. [2-6]
Prerequisites: Admission to and completion of Graduate Program in Supervision except for Practicum. A program of supervisory practice and participation in school activities conducted in a public school system at a level consistent with the qualification desired. A total of six semester hours is normally required.

580: PRACTICUM IN ELEMENTARY SCHOOL ADMINISTRATION. [2-6]

581: PRACTICUM IN SECONDARY SCHOOL ADMINISTRATION. [2-6]
Prerequisites: Admission to and completion of Graduate Program in Administration except for Practicum. A program of administrative practice and participation in administrative activities conducted in a public school system at a level consistent with the qualification desired. A total of six semester hours is normally required.

582: SEMINAR IN ELEMENTARY SCHOOL TEACHING. [3]
Prerequisites: Admission to and completion of Graduate Program
for Elementary Teachers except for Seminar. A study of the selected problems in teaching. Typical problem areas are: science, reading, mathematics, social studies, physical education, the slow learner, the gifted, the delinquent, and arts and crafts.

583: SEMINAR IN SECONDARY SCHOOL TEACHING. [3]
Prerequisites: Admission to and completion of Graduate Program for Secondary Teachers except for Seminar. A study of selected problems in teaching. Typical problem areas are: the slow learner, the gifted, the delinquent, reading, extra curricular activities and teaching problems within the subject area of the student.

590: METHODS OF EDUCATIONAL RESEARCH. [3]
This will be the first course normally taken by all, except preparation for teaching, students. The developments, the research problems and hypotheses, constructs and variables in experimental and descriptive studies, sampling techniques, principles of research design, types of research studies, research tools, analysis and interpretation of research findings, and the development of research proposals.

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 multi-nominal populations, and distribution free methods of analysis. Particular attention is given to the interpretation of statistics in educational writing.

592: PROBLEM. [3]
Prerequisite: Education 590 or 591. A problem of interest to the student utilizing accepted research methods under the supervision of a member of the graduate faculty.

593: THESIS. [6]
Prerequisites: Education 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.

594: SPECIAL TOPICS. [3-6]
By arrangement. May be repeated. Various subjects, principally by directed study, discussion, and research.

601: REMEDIAL READING [3]
Prerequisites: Collegiate Professional Certificate and Education 559 or 604. This course is designed for those who wish to specialize in reading. It includes the nature and cause of reading difficulties, the organization of remedial reading programs, remedial techniques, utilization of teacher aids and learning centers, psychological and health services, innovative methods and materials, and report writing.
602: PHYSICAL AND PSYCHOLOGICAL FACTORS IN READING. [3]
Prerequisites: Education 559 or 604, Education 603 and Admission to Graduate Program in Reading. A course designed to acquaint teachers with the physical and psychological factors involved in the reading process. The ideas of authorities in the field of reading will be emphasized. An advanced course for those wishing an in-depth study of clinical diagnosis and remediation.

603: DIAGNOSTIC AND EVALUATIVE TECHNIQUES IN READING. [3]
Prerequisites: Admission to Graduate Program in Reading, Education 601, and 591 or 531. A technical course in diagnosing reading problems. It is designed to include 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]
Prerequisite: Collegiate Professional Certificate. A course for teachers in the secondary or in the intermediate schools. Areas studied include: reading in the content areas, reading problems, causes, diagnosis, remediation, skills and speed reading.

605: TEACHING READING TO THE CULTURALLY DISADVANTAGED. [3]
Prerequisites: Education 559 or 604 and 531. A course designed to develop competencies in reading methods for the disadvantaged. Emphasis will be placed upon personal commitment and ability with the disadvantaged child, methods, techniques, innovative designs for teaching, problem areas, linguistic differences, pre-reading skills and the psychological development of the child.

607: TEACHING READING TO THE GIFTED. [3]
Prerequisite: Education 559 or 604, and 531. A course dealing with the higher levels of reading attainment. Content will include 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 Graduate Program in Reading and completion of all requirements except for the practicum. A required course for the master's degree in reading. The student will work under faculty supervision in a variety of remedial procedures in the Reading Center with both individuals and groups.

609: INTERNSHIP IN READING. [3]
Prerequisite: Admission to the Graduate Program in reading and completion of all requirements except for the internship, Education
608 and permission of the Department. A program of supervised teaching and participation as a reading specialist in a public school system. Emphasis will be given to consultative techniques.

625: UTILIZATION OF EDUCATIONAL TECHNOLOGY IN INSTRUCTION. [3]
Prerequisite: Collegiate Professional Certificate. A consideration of the effective utilization of educational technology in the teaching-learning situation. Particular attention is given to selection, production, evaluation, and utilization of instructional materials. (May not be substituted for Education 421.)

636: TECHNIQUES OF COUNSELING. [3]
Prerequisites: Admission to Graduate Program in Guidance and Counseling, and Education 531, 536, 538 or 539. Development of skills, competences, techniques, procedures, and approaches used in counseling.

637: OCCUPATIONAL AND VOCATIONAL COUNSELING. [3]
Prerequisites: Admission to Graduate Program in Guidance and Counseling, and Education 531, 536, 538 or 539. Principles, methods, and techniques of preparing and presenting occupational and vocational information to students at the appropriate educational levels.

638: ORGANIZATION AND ADMINISTRATION OF A GUIDANCE PROGRAM. [3]
Prerequisites: Admission to Graduate Program in Guidance and Counseling, and Education 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]
Prerequisite: Admission to Graduate Program in Guidance and Counseling, and permission of Instructor. Designed for the purpose of application and practice of guidance functions in a school setting.

THE FOLLOWING UPPER-LEVEL UNDERGRADUATE COURSES ARE ACCEPTABLE FOR GRADUATE CREDIT TOWARDS THE MASTER OF EDUCATION DEGREE:


Business Administration: 312, 412, 433

Chemistry: 331, 332, 336, 337, 422, 432, 441, 445, 461


http://catalog.gmu.edu

German: 361, 362, 405, 406, 409, 411, 412, 420, 425, 426

History: 411, 412, 421, 422, 433, 438, 443, 453, 464, 471, 473


Psychology: 303, 401, 403, 404, 410

Sociology: 302, 308, 382, 411

Spanish: 320, 400, 401, 403, 404, 407, 408, 410
DEPARTMENT OF HISTORY

Professor Cassara (Chairman)
Associate Professors Boothe, Moseley, Pugh, Spence
Assistant Professors Gleissner, Jensen, Pacheco, Saeed, Soder, Spindler

MASTER OF ARTS (HISTORY)

This program is designed to help students achieve a greater understanding of the discipline of history and to master the methodology of the historian. Since this is a research oriented program, it can be useful to students who plan to become candidates for the Ph.D. at another institution.

Students may concentrate on the history of the United States, Europe or Latin America. A limited number of courses are offered in non-Western fields as well, although no concentration is possible.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements listed on pp. 19-20, applicants for the Master of Arts degree in history 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

In addition to fulfilling the general degree requirements listed on pp. 30-31, the candidate for the Master of Arts degree in history must successfully complete the following:

1. Three semester-hours in History 500 (to be taken within the first nine hours of course work).
2. Three semester-hours in a research seminar in his field of concentration (chosen from History 511, 512, 521, 522, 531, 532).
3. Study of a foreign language (completion of a college-level intermediate course or the equivalent). This requirement may be met by proficiency examination administered by the Department of Foreign Languages. (Such an examination must be passed successfully before a student will be allowed to complete more than 15 credit hours of course work.)

4. Six semester-hours in History 590, a thesis accepted by at least three members of the graduate faculty in history.

5. A comprehensive examination administered by the faculty. The examination will cover the student’s area of major concentration and one minor field in history.

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.

The Master of Arts in Teaching is a terminal degree.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements listed on pp. 19-20, 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 that applicant has studied or from others directly familiar with his professional competence.

DEPARTMENTAL DEGREE REQUIREMENTS

In addition to fulfilling the general degree requirements listed on pp. 30-31, the candidate for the Master of Arts in Teaching of history must successfully complete the following:

1. Twenty-four semester-hours in history, including three credits in History 500.
2. Twelve semester-hours in education, including Education 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 College Professional Certificate (or its equivalent) in history prior to the award of the degree.

UNDERGRADUATE COURSES

The following upper division undergraduate courses have been approved for graduate credit. Catalog descriptions appear in the undergraduate catalog.

401: COLONIAL AMERICA. [3]


421: INTELLECTUAL AND CULTURAL HISTORY OF EUROPE, 1715-1848. [3]

422: INTELLECTUAL AND CULTURAL HISTORY OF EUROPE, 1848 TO THE PRESENT. [3]

433: THE UNITED STATES IN THE TWENTIETH CENTURY. [3]

438: SPANISH BORDERLANDS. [3]

441: FRANCE SINCE THE REVOLUTION. [3]

443: HISTORY OF SPAIN AND PORTUGAL. [3]

453: HISTORY OF MEXICO. [3]

464: MODERN INDIA AND PAKISTAN. [3]

471: MODERN CHINA. [3]

473: MODERN JAPAN. [3]

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.
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 (543): 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: RESEARCH SEMINAR IN UNITED STATES HISTORY. [3]
Prerequisite: Permission of the instructor. Research in specialized topics using primary sources.

512: RESEARCH SEMINAR IN UNITED STATES HISTORY. [3]

515: PROBLEMS IN AMERICAN HISTORY. [3, 3]
Readings and discussion of bibliographies, interpretations, and re-
search trends in topics selected by the instructor. A maximum of six hours may be earned.

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.

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: RESEARCH SEMINAR IN LATIN AMERICAN HISTORY. [3]
Prerequisite: Permission of the instructor. Research in specialized topics using primary sources.

522: RESEARCH SEMINAR IN LATIN AMERICAN HISTORY. [3]

525: PROBLEMS IN LATIN AMERICAN HISTORY. [3, 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.

531: RESEARCH SEMINAR IN EUROPEAN HISTORY. [3]
Prerequisite: Permission of the instructor. Research in specialized topics using primary sources.

532: RESEARCH SEMINAR IN EUROPEAN HISTORY. [3]

535: PROBLEMS IN EUROPEAN HISTORY. [3, 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.

An examination of the rise of the “new imperialism” in Great Britain
from 1870 to the end of empire and the gradual formation of the Commonwealth of Nations.

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.

551: THE CULTURAL HISTORY OF ISLAM. [3]
Religion, art, architecture, and literature of the Arabs, the Persians, the Moors of Spain, the Timurids of Central Asia, the Mughals of India and Pakistan, and the Turks. Some important political and cultural movements in different parts of the Islamic World will also be discussed.

555: PROBLEMS IN ASIAN HISTORY. [3, 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.

581: DIRECTED READING. [3]
An individual reading course on a topic agreed to by a student and a faculty member.

582: DIRECTED READING. [3]

590: THESIS. [6]
DEPARTMENT OF MATHEMATICS

Associate Professors Oppelt (*Chairman*), Draper, Papp
Assistant Professors Childress, Dorey, Kiley, Saperstone, Seidman, Sennott

MASTER OF SCIENCE (MATHEMATICS)

The mathematics graduate program is designed to give graduate instruction to those who seek the master's degree as well as those who wish to improve their professional skills.

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements, applicants for the master's degree in mathematics must have:

- A bachelor’s degree from an accredited institution.
- A grade point average of 2.75 on a 4.0 scale in the last two years of undergraduate work, or exceptional compensatory qualifications.
- Satisfactory scores in the Graduate Record Examination (GRE).
- Three letters of recommendation.

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 such courses as Math 515 and 521.

DEPARTMENTAL DEGREE REQUIREMENTS

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

- Complete no less than 30 hours of graduate work with a grade average of 3.0 or better.
- Attend two semesters of seminar or write a thesis. No more than 6 credit hours will be allowed for the thesis.
- Pass a comprehensive examination.

UNDERGRADUATE COURSES

The following upper division undergraduate courses have been approved for graduate credit. Catalog descriptions appear in the undergraduate catalog.

443, 444: APPLIED MATHEMATICS. [3, 3]

446, 447: NUMERICAL ANALYSIS AND DIGITAL COMPUTATION. [3, 3]
GRADUATE COURSES

A double number separated by a comma (Mathematics 515, 516) indicates that the course extends throughout two semesters of a session and that the first semester is a prerequisite to the second. The prerequisite may be waived by the Department Chairman.

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.

511, 512: COMPLEX ANALYSIS. [3, 3]

513, 514: ORDINARY DIFFERENTIAL EQUATIONS. [3, 3]

515, 516: REAL ANALYSIS. [3, 3]

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 the instructor. Affine, projective, hyperbolic, elliptical, and differential geometry; transformations and elementary combinatorics.
551, 552: STOCHASTIC PROCESSES AND APPLICATIONS. [3, 3]

591, 592: SEMINAR. [2, 2]

599: THESIS. [1-6]
Original or compilatory work to be evaluated by a committee of three faculty members.
MASTER OF ARTS (PSYCHOLOGY)

This program offers students the opportunity to continue their graduate education in Psychology with specializations in the field of tests, measurements, and assessment. Upon being granted the degree of Master of Arts degree in psychology, students will have the option of continuing their education towards the attainment of a Ph.D. degree at another university or seeking employment in the areas of their specialization.

The program of adult and child clinical tests, measurements, and assessment is of two years duration requiring 39 credits in graduate work; the program of industrial tests, measurement, and personnel assessment is of one and one-half years requiring 30 credits in graduate work (including a thesis).

DEPARTMENTAL ENTRANCE REQUIREMENTS

In addition to fulfilling the general entrance requirements listed on pp. 19-20, applicants for the Master of Arts degree in psychology should have majored in psychology at the undergraduate level. Students with undergraduate majors in fields other than psychology may be admitted to the program if they submit at least fifteen undergraduate hours in psychology including courses in psychological statistics, experimental psychology, psychological theories and systems, and psychological tests and measurements. Three letters of reference from professors of psychology with whom the applicant has studied or from others directly familiar with his professional competence are also required. The department may also require that undergraduate deficiencies be made up in courses without graduate credit.

DEPARTMENTAL DEGREE REQUIREMENTS

The student must meet all the general requirements for a degree as listed on pp. 30-31, with the exception of having to acquire 39 semester hours of graduate credit rather than 30 semester hours when enrolled in the child or adult clinical tests, measurement, and assessment program. All candidates for the adult clinical tests, measurement, and assessment program must successfully complete the following courses during their first year of residence: Psychology 503, 504, 511, 512, 515, and 516; during the second year of their resi-
PSYCHOLOGY

dence they must complete: Psychology 501, 502, 506, 528, and 550. All candidates for the child clinical tests, measurement, and assessment must successfully complete the following courses during their first year of residence: Psychology 503, 504, 511, 515, 516, and 522; during the second year of their residence they must complete 501, 502, 508, 528, and 550. All candidates for the industrial psychology tests, measurement, and assessment program must successfully complete the following courses during their first year of residence: Psychology 502, 503, 504, 531, 501, 507, 532, 534; during the first semester of the second year of residence they must complete: 590.

UNDERGRADUATE COURSES

The following upper division undergraduate courses have been approved for graduate credit (up to six hours). Catalog descriptions appear in the undergraduate catalog.

303: COGNITIVE DEVELOPMENT. [3]
403: SEMINAR IN INFANT DEVELOPMENT. [3]
404: THE EXCEPTIONAL CHILD. [3]
410: COMPARATIVE PSYCHOLOGY. [4]
415: HUMAN FACTORS ENGINEERING. [3]
416: THE CLINICAL METHOD IN PSYCHOLOGY. [3]

GRADUATE COURSES

501: ADVANCED GENERAL PSYCHOLOGY I. [3]
A critical review of the major topics of experimental psychology: learning, motivation, cognition, perception (the senses), thinking and problem solving, etc. Major emphasis will be placed on explicating and evaluating the experimental and/or empirical research in these areas and the problems inherent in generalizing the research findings.

502: ADVANCED GENERAL PSYCHOLOGY II. [3]
The problematics involved in the definition of psychology as an empirical science will be the core of this course. The influence of philosophy of science will be traced as it affected and still affects psychology as a discipline, i.e., in its research, analysis, and theoretical formulations. Emphasis will be placed upon writings of Wundt, Watson, Hull, Guthrie, Tolman, Brunswik, Lewin, and Kohler.

503: EXPERIMENTAL AND RESEARCH DESIGN. [3]
Prerequisite: Psychology 322 or equivalent. Advanced experimental design and the required statistical analytic techniques will be reviewed (factor analysis, multiple correlation, complex analysis of
PSYCHOLOGY 75

variance, non-parametric statistics, etc.). Examples of experiments in various fields of psychology will be studied.

504: BIOLOGICAL FOUNDATIONS OF PSYCHOLOGY. [3]
Prerequisite: Psychology 307 or equivalent. A review of the physiological basis of normal behavior. The effects of physiological changes on behavior be they pathological, drug induced, fatigue and/or malnutrition, etc. Physiological changes concomitant with psychopathology.

506: THEORIES OF PERSONALITY. [3]
Prerequisite: Psychology 202 or equivalent. 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]
General articulated theories of social psychology will be studied in detail: the social psychology of S. E. Ásch, the social psychology of K. Lewin, and the social psychology of F. Heider.

508: THEORIES OF DEVELOPMENT. [3]
A survey of the major theories of infant and child development including the works of Piaget, Freud, Erikson, and Spitz.

511: PSYCHOLOGICAL ASSESSMENT. [3]
A study of the major tests and assessment procedures used in clinical diagnosis and assessment, as well as a discussion of the nature, problems, and predictive abilities of psychological assessment techniques. The administration and scoring of the major personality and organic assessment procedures will be studied for both projective and non-projective techniques. In addition, the principles of interpretation of these assessment procedures will also be discussed.

512: ADVANCED CLINICAL ASSESSMENT. [3]
Prerequisite: Psychology 511. An advanced course in assessment and diagnosis. The problems involved in differential diagnosis are discussed, as well as assessment and diagnostic problems such as the nature of organic disorders and their assessment, differentiation of schizophrenia from brain damage, the differential diagnosis of psychoses, character disorders and neuroses, assessment problems with adolescents, and suicide indicators on projective tests.

515: THE MEASUREMENT OF INTELLIGENCE. [3]
The administration, scoring and interpretation of the major infant, child, and adult intelligence tests, as well as development of IQ tests, theories of intelligence, and current trends and developments in intellectual assessment. Individual and group tests of intelligence will be surveyed with emphasis on the individual tests.
516: GENERAL PSYCHOPATHOLOGY. [3]
An intensive survey of the major types of psychopathological disturbances including a discussion of the etiology, symptoms, and dynamics of the neuroses, psychoses, character disorders, and somatic disorders.

517: CHILD PSYCHOPATHOLOGY. [3]
An intensive survey of the major types of psychopathological disturbances of infancy and childhood.

522: ADVANCED CHILD ASSESSMENT. [3]
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]
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.

531: INDUSTRIAL AND PERSONNEL TESTING AND EVALUATION. [3]
Prerequisite: Psychology 505. The justification for, administration, scoring, and interpretation of the standard tests used by industry for the selection and assessment of personnel will be studied.

532: THE SOCIAL PSYCHOLOGY OF INDUSTRY. [3]
The industrial setting will be studied in terms of a society. The factors determining motivation of personnel, above and beyond remuneration, will be identified and the nature of the determination will be elucidated. Special emphasis will be placed upon the effect of organization and administrative practices upon motivation and performance.

534: SPECIAL PROBLEMS IN HUMAN FACTORS ENGINEERING. [3]
A seminar course reviewing fundamental problems inherent in applying psychological knowledge and techniques to industrial problems in general and in the field of tests and measurement in particular. Special emphasis will be placed on deficiencies of performance and on industrial needs which are yet to be met.

550: PSYCHOLOGICAL PRACTICUM. [6]
Practical experience in a clinical setting as assigned.

590: THESIS. [6]
## Typical Schedules

### Adult Clinical

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>503 Exper. Method</td>
<td>512 Advanced Assess.</td>
</tr>
<tr>
<td>504 Biol. Founda.</td>
<td>515 IQ Testing</td>
</tr>
<tr>
<td>511 Intro. Psych. Assess. Lab</td>
<td>516 General Psychopath</td>
</tr>
<tr>
<td></td>
<td>Lab-Adult</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>502 Advanced Genl II</td>
<td>501 Advanced Genl I</td>
</tr>
<tr>
<td>506 Theories of Personality</td>
<td>Elective</td>
</tr>
<tr>
<td>528 Psychotherapy</td>
<td>550 Practicum</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>512 Advanced Assess.</td>
<td>501 Advanced Genl I</td>
</tr>
<tr>
<td>515 IQ Testing</td>
<td>Elective</td>
</tr>
<tr>
<td>516 General Psychopath</td>
<td>550 Practicum</td>
</tr>
<tr>
<td>Lab-Adult</td>
<td>6</td>
</tr>
</tbody>
</table>

### Child Clinical

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>503 Exper. Method</td>
<td>515 IQ Testing</td>
</tr>
<tr>
<td>504 Biol. Founda.</td>
<td>516 Child Psychopathology</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>502 Advanced Genl II</td>
<td>501 Advanced Genl I</td>
</tr>
<tr>
<td>508 Theories of Develop.</td>
<td>Elective</td>
</tr>
<tr>
<td>528 Psychotherapy</td>
<td>550 Practicum</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>515 IQ Testing</td>
<td>501 Advanced Genl I</td>
</tr>
<tr>
<td>516 Child Psychopathology</td>
<td>Elective</td>
</tr>
<tr>
<td>522 Adv. Child Assess.</td>
<td>550 Practicum</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

### Industrial

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>502 Advanced Genl II</td>
<td>501 Advanced Genl I</td>
</tr>
<tr>
<td>503 Exper. Method</td>
<td>507 Advanced Social</td>
</tr>
<tr>
<td>504 Biol. Founda.</td>
<td>532 Soc. Psy. of Industry</td>
</tr>
<tr>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>590 Thesis</td>
<td></td>
</tr>
</tbody>
</table>
University Directories

Graduate School
Rector and Visitors of the University
Administration
Library
George Mason University
Foundation, Inc.
Patriot Educational Foundation, Inc.
Alumni Association of
George Mason University
Graduate School

William Scott Willis. ................. Dean of the Graduate School
B.A., M.A., Doct. Univ. (Paris)

DEPARTMENT CHAIRMEN

BEHAVIORAL SCIENCES (PSYCHOLOGY)

Nehemiah Jordan. ..................... Professor of Psychology
B.A., Brooklyn College, 1948; Ph.D., University of Kansas, 1952.

BIOLOGY

Michael Gordon Emsley .................. Professor of Biology
B.Sc., Imperial College of Science and Technology, 1953;
A.R.C.S. Associateship of Royal College of Science, 1953; Ph.D.,

BUSINESS ADMINISTRATION

Hale Nuckolls Tongren .................. Associate Professor of
Business Administration
M.B.A., Harvard University, 1959; D.B.A., George Washing-
ton University, 1968.

EDUCATION

James Max Snyder ...................... Professor of Education
B.S.Ed., West Virginia University, 1935; M.A., West Virginia
University, 1939; Prof. Cert. American University, 1966; Ed.D.,
American University, 1967.

HISTORY

Ernest Cassara ......................... Professor of History
A.B., Tufts College, 1952; B.D., Tufts University, 1954; Ph.D.,
Boston University, 1957.

MATHEMATICS

John Andrew Oppelt .................. Associate Professor of Mathematics
A.B., Loyola College, 1959; M.S., University of Notre Dame,
1961; Ph.D., University of Notre Dame, 1965.
Graduate Council

Henry Joseph Bindel, Jr. ........ Associate Professor of Education
B.S., Eastern Kentucky University, 1949; M.A., Eastern Ken­
tucky University, 1951; Ed.D., University of Maryland, 1971.

Howard Ruben Bloch ........ Associate Professor of Economics
A.B., Duke University, 1958; Ph.D., Princeton University, 1964.

Robert Francis Cozzens ........ Associate Professor of Chemistry
B.S., University of Virginia, 1963; Ph.D., University of Vir­
ginia, 1966.

Frederick James Dorey .... ...... Assistant Professor of Mathematics
B.A., Boston College, 1964; M.A., Boston College, 1966; Ph.D.,
University of Massachusetts, 1969.

James Louis Jackson .......... Professor of English, Chairman of
Department of English
A.B., University of Illinois, 1938; M.A., University of Illinois,
1940; Ph.D., University of Illinois, 1949.

Robert Charles Krug (ex officio) . Professor of Chemistry, Provost
B.S., University of Richmond, 1940; M.S., Pennsylvania State
University, 1941; Ph.D., Ohio State University, 1944.

Evans John Mandes .......... Associate Professor of Psychology
A.B., George Washington University, 1961; M.S., George
Washington University, 1963; Ph.D., George Washington Uni­
versity, 1966.

James Howard Sood .......... Assistant Professor of Business Administration
B.S., College of William and Mary, 1954; B.S., University of
Ph.D., George Washington University, 1972.

Vernon Gladden Spence .......... Associate Professor of History
B.A., McMurry College, 1946; M.A., Southern Methodist Uni­
versity, 1947; Ph.D., University of Colorado, 1968.

James Robert Wall ............ Associate Professor of Biology
B.S., Virginia Polytechnic Institute, 1951; Ph.D., Cornell Uni­
versity, 1955.

William Scott Willis (Chairman) . Professor of French, Dean of
the Graduate School
B.A., University of Virginia, 1942; M.A., University of Vir­
Rector and Visitors

John C. Wood

Rector

Arthur Windsor Arundel..........................McLean
Elias Blake, Jr....................................Reston
Harriet F. Bradley................................McLean
Albert Vickers Bryan, Jr..........................Alexandria
Preston C. Caruthers...............................Arlington
A. George Cook, III.................................Alexandria
Alvin E. Conner, M.D..............................Manassas
John J. Corson....................................Arlington
William C. Frogale.................................Falls Church
Carol M. Griffie..................................Fairfax
John T. Hazel, Jr..................................Fairfax
Warren Joseph Pace................................Falls Church
Lutrelle Fleming Parker, Sr........................Arlington
Lester G. Sturgill..................................Leesburg
Currell Hunton Tiffany.............................Warrenton
Administration

PRESIDENT'S OFFICE
Lorin Andrew Thompson, B.A., M.A., Ph.D. .......... President

ACADEMIC AFFAIRS
Robert Charles Krug, B.S., M.S., Ph.D. .............. Provost
Leon Estel Boothe, B.S., M.A., Ph.D. .......... Dean of the College of
Arts and Sciences
Clayton Moss Schindler, B.A., M.S., Ph.D. .... Dean of the College
of Professional Studies
William Scott Willis, B.A., M.A., Doct. Univ. (Paris) .. Dean of the
Graduate School
William Cargill Johnston, B.A., M.S., Ph.D. .......... Dean of the
Summer Session

BUSINESS OFFICE
Henry Patteson Adams, B.S. ........................ Comptroller
John Robert Hiltenbrand, B.S. ........................ Director of Personnel

DEVELOPMENT AND INFORMATION
John William Gephart, B.S., M.S.B.A. .... Director of Development
William Moore McDowell, B.A., M.A. .... Director of Information
Services

STUDENT AFFAIRS
Robert Amrine Turner, B.S., M.A.T. ............... Dean of Students
Ellis Clinton Gedney, B.A., M.S., Ed.D. ......... Director of Financial
Aid and Placement

ADMISSION AND RECORDS
Louis John Aebischer, B.S., M.S., Ed.S. ........ Director of Admissions
Lewis Carson Jones, B.A., M.S.T. ................. Assistant Director
of Admissions

REGISTRAR
Michael James McDermott, Jr., A.B., Ph.L. .... Registrar

PUBLICATIONS
John William Gephart, B.S., M.S.B.A. ...... Director of Publications

PLANNING AND RESEARCH
Joseph Ingram Gurfein, B.S., M.S. ............ Director of Planning
John Patrick Sullivan, B.S., M.A. .... Director of Institutional Analysis

COUNSELING
Walter Jennings Moretz, Jr., B.A., B.D., Ph.D. .... Director of
University Counseling and Psychological Services Center
Library

Patrick Joseph Larkin, A.B., M.S.L.S. .............. Library Director
Catherine Ann Belter, B.A., M.L.S. .............. Reference Librarian
Shirley R. Glazener, B.A., M.L.S. .............. Reference and Government Documents Librarian
Carol Cantlon Henderson, B.A., M.S.L.S. .............. Reference and Circulation Librarian
Alana Wang Ho, B.A., M.S. ................ Catalog Librarian
Mary Eileen Hood, B.A., M.L. ................ Acquisitions Librarian
Agnes Liu Mao, B.L., M.L.S. ................ Catalog Librarian
Patrick Francis McIntyre, B.A., M.L.S. .............. Reference and Periodicals Librarian
Patricia Ann Neighbarger ................ Catalog Librarian
Richard Bennett O'Keeffe, B.A., M.S.L.S. .............. Assistant Library Director

George Mason University
Foundation, Inc.

LeRoy R. Eakin, Jr. ................ President
John T. Hazel, Jr. ................ Vice-President
George E. McKain ................ Executive Director/Secretary
J. William Gephart ................ Executive Director/Secretary

Patriot Educational Foundation, Inc.

Clinton E. Miller, Jr. ................ President
W. Franklin Gooding ................ President-Elect
Dr. James L. Jackson ................ Vice President/Scholarships
Steven L. Czarsty ................ Vice President/Memberships
Norman A. Yance ................ Vice President/Club Activities
Theodore B. McCord, Jr. ................ Treasurer
J. William Gephart ................ Executive Director/Secretary

Alumni Association of George Mason University

Gail G. Johnson ................ President
Charles P. Mendenhall ................ Executive Vice President
David B. West ................ Vice President/Finances
Dennis A. Hill ................ Vice President/Clubs & Chapters
Mondania B. Gallagher ................ Vice President/Membership
Theodore B. McCord, Jr. ................ Vice President/Alumni Affairs
Theodore C. Remington ................ Treasurer
J. William Gephart ................ Secretary/Director of Alumni Relations
## Index

Accreditation .................................................................................................................. 8
Administration .................................................................................................................. 82
Admission
  from another college ........................................................................................................ 20
  medical report .................................................................................................................. 20
Alumni Association .......................................................................................................... 83
Attendance ......................................................................................................................... 29
Audit ................................................................................................................................... 28
Automobiles
  See Motor Vehicles

Behavioral Sciences Department
  courses ............................................................................................................................... 74-76
  M.A. (Psychology) ........................................................................................................... 73-74
  typical schedules ............................................................................................................. 77
Biology Department
  courses ............................................................................................................................. 34-36
  requirements ................................................................................................................... 33-34
Business Administration Department
  courses ............................................................................................................................... 39-41
  M.B.A. ............................................................................................................................ 37-38

Calendar ................................................................................................................................ 4-6
Campus Ministry Association ............................................................................................ 15
Change of Status and Address .......................................................................................... 16
Change of Courses ............................................................................................................. 28
Classification of Graduate Students .................................................................................. 18
Counseling Center .............................................................................................................. 14, 82
Commencement .................................................................................................................. 31
Conduct ................................................................................................................................ 15-16
Correspondence Directory ................................................................................................. 7
Credit and Grades ................................................................................................................. 28

Degree Requirements
  academic ............................................................................................................................. 30
  application .......................................................................................................................... 31
  limited credit ..................................................................................................................... 30
  microfilm .......................................................................................................................... 31
  residence ........................................................................................................................... 30
  thesis ................................................................................................................................. 30
  time limit ........................................................................................................................... 31
  see also graduate programs for specific requirements and course offerings

Department Chairmen ........................................................................................................ 79
Deposits ................................................................................................................................ 23
Dismissal ............................................................................................................................... 28
Economics Department
  courses ........................................ 43-46
  requirements .................................. 42-43

Education Department
  courses .......................................... 53-63
  entrance requirements .......................... 47-53
  programs:
    elementary education .......................... 49-50
    guidance and counseling ...................... 51-52
    reading ........................................ 53
    secondary education ........................... 50-51
    school administration ........................ 50-51
    supervision ................................... 52
  acceptable undergraduate courses .............. 62-63

Examinations
  absence from examinations & special examinations ... 30

Facilities ........................................ 12

Fees & expenses
  classification as a Virginia student .......... 22
  deferred payment ................................ 22
  deposits ........................................ 23
  fees schedule ................................... 21
  payment of fees ................................ 22
  motor vehicle registration fee ............... 23
  non-resident fee ................................ 21
  refunds ........................................ 23
  transcript fee .................................. 23

Financial Assistance
  emergency loan fund ............................ 25
  federal financial aid ........................... 24
  graduate assistantships, scholarships ........ 25
  state aid programs ............................. 24-25

Firearms ......................................... 16

George Mason University
  academic regulations ........................... 27
  accreditation .................................... 8
  administration ................................... 82
  admission & registration ....................... 19-20
  campus .......................................... 12
  history ......................................... 9
  location & map ................................... 11
  purpose ......................................... 8
  Rector & Visitors ............................... 81
  regulations ..................................... 15-16

George Mason University Foundation, Inc. ...... 83

Grade reports & examinations .................... 29-30

http://catalog.gmu.edu
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Record Examinations</td>
<td>19</td>
</tr>
<tr>
<td>Grades &amp; grade points</td>
<td>28</td>
</tr>
<tr>
<td>Graduate Council</td>
<td>80</td>
</tr>
<tr>
<td>Honor System</td>
<td>14</td>
</tr>
<tr>
<td>History Department</td>
<td>66-69</td>
</tr>
<tr>
<td>courses</td>
<td>65-66</td>
</tr>
<tr>
<td>requirements</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>14</td>
</tr>
<tr>
<td>Library, Charles Rogers Fenwick</td>
<td>13</td>
</tr>
<tr>
<td>staff</td>
<td>83</td>
</tr>
<tr>
<td>Living accommodations</td>
<td>14</td>
</tr>
<tr>
<td>Loans</td>
<td>24-25</td>
</tr>
<tr>
<td>Map of Northern Virginia</td>
<td>11</td>
</tr>
<tr>
<td>Masters' Degrees</td>
<td></td>
</tr>
<tr>
<td>Master of Arts (Economics)</td>
<td>42</td>
</tr>
<tr>
<td>Master of Arts (History)</td>
<td>64</td>
</tr>
<tr>
<td>Master of Arts (Psychology)</td>
<td>73</td>
</tr>
<tr>
<td>Master of Arts in Teaching (History)</td>
<td>65</td>
</tr>
<tr>
<td>Master of Business Administration</td>
<td>37</td>
</tr>
<tr>
<td>Master of Education</td>
<td>47</td>
</tr>
<tr>
<td>Master of Science (Biology)</td>
<td>33</td>
</tr>
<tr>
<td>Master of Science (Mathematics)</td>
<td>70</td>
</tr>
<tr>
<td>Mathematics Department</td>
<td></td>
</tr>
<tr>
<td>courses</td>
<td>70-72</td>
</tr>
<tr>
<td>requirements</td>
<td>70</td>
</tr>
<tr>
<td>Medical Report</td>
<td>20</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>16</td>
</tr>
<tr>
<td>registration fee</td>
<td>23</td>
</tr>
<tr>
<td>Non-academic Events &amp; Publications</td>
<td>16</td>
</tr>
<tr>
<td>Non-resident fee</td>
<td>21</td>
</tr>
<tr>
<td>Patriot Educational Foundation</td>
<td>83</td>
</tr>
<tr>
<td>Permission to take course elsewhere</td>
<td>29</td>
</tr>
<tr>
<td>Placement Service</td>
<td>14</td>
</tr>
<tr>
<td>President</td>
<td>82</td>
</tr>
<tr>
<td>Probation</td>
<td>28</td>
</tr>
<tr>
<td>Psychology: see Behavioral Sciences</td>
<td></td>
</tr>
<tr>
<td>Rector &amp; Visitors</td>
<td>81</td>
</tr>
<tr>
<td>Refunds</td>
<td>23</td>
</tr>
<tr>
<td>Delayed Registration</td>
<td>21</td>
</tr>
<tr>
<td>Reports</td>
<td>29</td>
</tr>
</tbody>
</table>
INDEX

Scholarships ................................................................. 25
Semester-Hour & Course Load ............................................. 28
Solicitors & Salesmen ..................................................... 16
Student Services ............................................................. 14
Student Identity Card ..................................................... 21
Summer Session ............................................................... 26

Time Limit ................................................................. 31
Transfer of Credit .......................................................... 20
Transcript Fee ............................................................... 23

Veterans’ Affairs ............................................................ 25–26
Virginia Student, Classification as ....................................... 22

Withdrawal
   enforced ........................................................................ 29
   voluntary .................................................................... 29

Withholding Academic Credit ............................................. 23