GEORGE MASON UNIVERSITY BULLETIN

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THE 1972-73 BULLETIN
of the
UNDERGRADUATE COLLEGES
GEORGE MASON UNIVERSITY

Published July 1, 1972
Fairfax, Virginia
22030
"...I charge them on a father's blessing never to let the motives of private interest or ambition induce them to betray, nor the terrors of poverty and disgrace, or the fear of danger or of death, deter them from asserting the liberty of their country and endeavoring to transmit to their posterity those sacred rights to which themselves were born."

ADMONITION TO HIS SONS BY GEORGE MASON IN HIS WILL, 1792

"...I am closing the last scenes of life by fashioning and fostering an establishment for the instruction of those who are to come after us. I hope its influence on their virtue, freedom, fame, and happiness, will be salutary and permanent."

THOMAS JEFFERSON
Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I</td>
<td>GENERAL INFORMATION</td>
</tr>
<tr>
<td></td>
<td>Calendar, 4; Correspondence Directory, 7; Statement of Purpose, 8; History of George Mason, 9.</td>
</tr>
<tr>
<td>Chapter II</td>
<td>CAMPUS AND FACILITIES</td>
</tr>
<tr>
<td></td>
<td>Location, 11; Facilities, 12; Student Life, 13; Student Services, 13; Regulations, 16.</td>
</tr>
<tr>
<td>Chapter III</td>
<td>ENTERING GEORGE MASON COLLEGE</td>
</tr>
<tr>
<td></td>
<td>Nature of Announcements, 19; Admission Requirements, 19; Registration, 22; Fees, 23; Financial Aid, 25; Veterans' Affairs, 28.</td>
</tr>
<tr>
<td>Chapter IV</td>
<td>ACADEMIC REGULATIONS</td>
</tr>
<tr>
<td></td>
<td>Introduction, 30; Credit and Grades, 30; Reports and Examinations, 32; Deficiencies, 33; Standing, 36; Declaration of a Major, 39; Honors, 39.</td>
</tr>
<tr>
<td>Chapter V</td>
<td>ACADEMIC PROGRAMS AND DEGREE REQUIREMENTS</td>
</tr>
<tr>
<td></td>
<td>General, 40; College of Arts and Sciences—Bachelor of Arts, 43; Bachelor of Science, 44; College of Professional Studies—Bachelor of Science (Business Administration), 46; Bachelor of Science (Education), 47.</td>
</tr>
<tr>
<td>Chapter VI</td>
<td>COURSES OF INSTRUCTION</td>
</tr>
<tr>
<td></td>
<td>Introduction, 52; College of Arts and Sciences—Department of Behavioral Sciences, 53; Department of Biology, 63; Department of Chemistry, 68; Department of English, 71; Department of Foreign Languages, 78; Department of History, 88; Department of Humanities, 95; Department of Mathematics, 105; Department of Physics, 109; Department of Social Sciences, 114; Interdisciplinary Programs—Latin American Studies, 121; Law Enforcement, 124; College of Professional Studies—Department of Business Administration, 127; Department of Education, 132; Department of General Studies, 144.</td>
</tr>
<tr>
<td>Chapter VII</td>
<td>DEGREES, HONORS, AWARDS</td>
</tr>
<tr>
<td></td>
<td>Degrees Conferred, 148; Awards, 158.</td>
</tr>
<tr>
<td>Chapter VIII</td>
<td>COLLEGE DIRECTORIES</td>
</tr>
<tr>
<td></td>
<td>Rector and Visitors, 160; Administration, 161; Faculty, 163; Retired Faculty, 178; Supporting Services, 178; Student Government Officers, 179; George Mason College Advisory Board, 179; George Mason University Foundation, Inc., 179.</td>
</tr>
<tr>
<td>INDEX</td>
<td>181.</td>
</tr>
</tbody>
</table>
General Information

Calendar
Correspondence Directory
Statement of Purpose
History of George Mason University
ACADEMIC CALENDAR, 1972-73

First Semester

Monday, July 3 .................................. Last day for students not in continuous registration, summer session excluded, to notify Admissions Office for readmission next semester

Monday, August 28 and Tuesday, August 29 .................................. Pre-registered students pick up assigned schedules (see page 22)

Foreign Language placement exams on Monday, August 28

Tuesday, August 29 .................................. Orientation for Faculty. Student Activity Orientation. See page 6

Wednesday, August 30 and Thursday, August 31 .................................. Advising and registration for all transfer students and returning students who did not pre-register. See registration instructions page 6. English proficiency test Thursday, August 31. New Freshman academic briefing Thursday, August 31

Tuesday, September 5 and Wednesday, September 6 .................................. Advising and registration of new Freshmen. See registration instruction page 6

Thursday, September 7 .................................. First day of classes

Wednesday, September 13 .................................. Last day for adding new courses for all students

Wednesday, October 18 .................................. Last day for dropping a course without incurring a grade of F

Monday, October 23 .................................. Last day for June Degree Applications

Monday, October 30 .................................. Mid-term progress reports due from faculty

Monday, November 6 .................................. Distribution of mid-term progress reports

Wednesday, November 8 .................................. Spring semester schedule of classes published

Friday, November 10 .................................. Patriot’s Day

Monday, November 13 through Tuesday, November 28 .................................. Pre-registration for second term. See registration instructions page 6

Tuesday, November 21 .................................. Last day for returning students who were not enrolled first semester to notify Admissions Office if they plan to return second semester

Thursday, November 23 through Sunday, November 26 .................................. Thanksgiving recess

Wednesday, December 6 through Friday, December 8 .................................. Pre-registered students pick up assigned schedules

Wednesday, December 13 .................................. Last day of classes

Thursday, December 14 through Wednesday, December 20 .................................. Examinations
Thursday, December 21 through Christmas Recess
Sunday, January 14

Second Semester

Friday, January 12 Foreign Language placement exams
Last day for preregistered students to pick up course schedules
Monday, January 15 and Advising and registration of returning students who did not pre-register and new students. See registration instructions page 6
Tuesday, January 16 English proficiency test Tuesday, January 16

Wednesday, January 17 First day of classes
Tuesday, January 23 Last day for adding new courses for all students

Tuesday, February 27 Last day for dropping a course without incurring a grade of F
Friday, March 9 Last day for Summer Degree Applications
Saturday, March 17 through Spring Recess
Sunday, March 25

Monday, March 26 Applications for renewal of scholarships and loans due available

Monday, March 26 Fall semester schedule of classes available

Wednesday, March 28 through Pre-registration for First Term 1973-74. See registration instructions page 6
Friday, April 6 George Mason Day
Friday, April 20 and Easter break
Monday, April 23

Thursday, May 10 and Reading days
Friday, May 11
Monday, May 14 through Examinations
Tuesday, May 22
Sunday, May 27 Commencement

Summer Session 1973

*Thursday, June 7 and Registration for Summer School
*Friday, June 8 First term begins
*Monday, June 11 Second term begins
*Thursday, July 12 Second term ends
*Tuesday, July 17 Second term ends
*Thursday, August 16

*These dates are tentative; details and final dates for the Summer Session are published in a separate bulletin.
Registration, Academic Briefing and Orientation

First and Second Terms 1972-73

Tuesday, August 29 . . . . . . . Orientation on student activities for all students new to George Mason College (transfer and new Freshmen)

Wednesday, August 30 . . . . 8:00 a.m - 10:00 a.m. - Academic briefing for all transfer students. College I - Lecture Hall; College II - North Campus

Transfer students and returning students who did not pre-register may register alphabetically as follows at the Main Campus:

Wednesday, August 30 . . . . 9:00 - 1:00 Names H - N
1:00 - 5:00 Names O - Z

Thursday, August 31 . . . . . . . 9:00 - 1:00 Names A - G

New Freshmen academic briefing will be held as follows:

Thursday, August 31 . . . . . . . 1:00 - 5:00 Academic briefing of all new Freshmen. College I - Lecture Hall; College II - North Campus

New Freshmen may register alphabetically as follows at the Main Campus:

Tuesday, September 5 . . . . . . . 9:00 - 1:00 Register Names H - N
1:00 - 5:00 Register Names O - Z

Wednesday, September 6 . . . . . . . 9:00 - 1:00 Register Names A - G

Pre-registration for Second Term 1972-73 - Students planning on returning next term should pre-register as follows:

Monday and Tuesday, Nov. 13 and 14 . . . . . . . SENIORS - See Adviser and file pre-registration request

Thursday and Friday, Nov. 16 and 17 . . . . . . . JUNIORS - See Adviser and file pre-registration request

Monday and Tuesday, Nov. 20 and 21 . . . . . . . SOPHOMORES - See Adviser and file pre-registration request

Monday and Tuesday, Nov. 27 and 28 . . . . . . . FRESHMEN/SPECIAL/POST GRADUATE - See Adviser and file pre-registration request

Registration and Briefings for Second Term 1972-73 - Students who did not pre-register and new students may register as follows:

Monday, January 15 . . . . . . . 8:00 - 10:00 Orientation and academic briefing for all new students

Registration:
10:00 - 1:00 Names O - Z
1:00 - 4:00 Names A - G

Tuesday, January 16 . . . . . . . 9:00 - 12:00 Names H - N

Pre-registration for First Term 1973-74 - Students planning on returning next year should pre-register as follows:

Wed. and Thurs., March 28 and 29 . . . . . . . Returning SENIORS and JUNIORS. See Adviser and file pre-registration request

Mon. and Tues., April 2 and 3 . . . . . . . SOPHOMORES - See Adviser and file pre-registration request

Thurs. and Fri., April 5 and 6 . . . . . . . FRESHMEN/SPECIAL/POST GRADUATE - See Adviser and file pre-registration request
CORRESPONDENCE DIRECTORY

Inquiries to the University should be addressed as indicated below:

Academic Programs (Undergraduate) .... Dean of Arts and Sciences
Dean of Professional Studies
Academic Programs (Graduate) ........ Dean of Graduate Program
Admissions .......................... Director of Admissions
Athletics ........................... Director of Athletics
Catalog ........................... Director of Admissions
Financial Matters .................... Business Manager
Gifts and Bequests .................... President
Placement Services .................... Dean of Students
Public Relations and Development Program .... President
Scholarships ....................... Dean of Students
Student Affairs ..................... Dean of Students
Summer Session ..................... Dean of Summer Session
Transcripts ........................ Registrar

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.
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 seventeen 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 College 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, 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.

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

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 March 1, 1972, the former branch of the University of Virginia became an independent institution under the name of George Mason University.

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

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 eight 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, the Arts and Sciences Building, a Physical Education Building, and a Biological Greenhouse. A Student Union is presently under construction, and current plans call for the University's first residence hall to be ready for occupancy by September, 1974.

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. According to the present Master Plan, each college will be expected to serve about 2,500 students.

Planning is already under way for the first building of College II, a large addition to the library, and the expansion of the Student Union. These buildings should be ready for use by early 1975.

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, 1971, the George Mason College Foundation signed an agreement with the City of Fairfax to purchase the Old 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.

LIBRARY. The Charles Rogers Fenwick Library is situated at the southeastern side of the present complex of campus buildings. The building, completed in late 1967, is the first increment of a larger complex planned to provide library services for a rapidly expanding institution. In keeping with its role as the focus for the intellectual and cultural interests of the University the building is of classically simple design. At present it is equipped to seat approximately 300 people and house approximately 70,000 volumes.
Although books are usually selected to support the curricula of the University, other materials of enduring value and general interest are also acquired. The present collection includes over 70,000 books, 8,000 bound periodicals, 100,000 microform units, and more than 5,000 pamphlets and maps. Approximately 1,300 current periodicals are received. The library is also a selective depository for publications of the United States Government.

The University library has become increasingly the laboratory in which much of the student's work is done — instead of a single volume, the whole library is now his textbook. Independent research projects are encouraged as well as critical or creative work in the expectation that all students will learn to use primary sources. To further wide acquaintance with books, the library at George Mason University utilizes an open-shelf arrangement which permits direct access to nearly all of the books in the collection and encourages browsing or study.

Loan arrangements with other state institutions of higher education and special libraries make it possible to draw on the many existing resources located in the state. The vast resources of the nearby Library of Congress are open to students interested in specialized fields. Inter-library loans are made from the many libraries in the Washington area. The resources of Virginia's academic and special libraries, as well as other collections in the United States, are available for rapid loans via teletype service. The library is open ninety hours per week.

STUDENT LIFE

ACTIVITIES. Students at George Mason University participate in the activities of the Student Government and elections for these offices are held in the spring. Students also administer the Honor System of the University, and elections for positions on the Honor Committee are held once a year.

A student in freshman or sophomore status (less than fifty-four semester-hours of credit) is ineligible to hold an elected or appointed office in any student organization or activity of either a governmental, athletic or managerial character, if his cumulative grade point average is less than 2.000. Any student on probation is not only ineligible to hold an elected or appointed office, but is also ineligible to participate in any athletic or other activity representing the University on either an intercollegiate or club level and/or to serve as a working staff member of any student organization. It is the responsibility of the individual student to notify his organization when he becomes ineligible. Authority is vested in the Dean of his college, however, to remove the restriction on activities, in whole or part, for individual cases.

There are student organizations which cater to many student interests: political, forensic, musical or dramatic, scientific, recreational, social and religious. For a complete listing of recognized student organizations, inquire at the Student Government Office.
Student publications comprise a yearbook, newspaper and literary magazine.
Participation in student activities is limited to bona fide registered students.

ATHLETICS. The intercollegiate athletic program offers competition between the University and various colleges in Virginia, Maryland and other states on the East Coast. Intercollegiate competition is conducted in cross-country, soccer, basketball, wrestling, fencing, baseball, golf and tennis. The University is a member of two national athletic organizations – National Collegiate Athletic Association and National Association of Intercollegiate Athletics. Under their auspices freshmen are eligible for varsity competition. The University participates in the Mason-Dixon Intercollegiate Athletic Conference and the Potomac Intercollegiate Conference. Competition outside of conference play is furnished by American University, University of Virginia, University of Richmond, Georgetown University, George Washington University, University of Delaware and others. The Athletic Council has general supervision over the intercollegiate athletic program.

The intramural program enables each student to participate voluntarily in sports of his own choosing. Facilities are available for tennis, badminton, basketball, volleyball, flag-football, trap and skeet, cross-country, table tennis and softball. The Intramural Council, composed solely of students, conducts the intramural program.

The University as a member of the NCAA and NAIA abides by all the rules of these organizations.

STUDENT SERVICES

LIVING ACCOMMODATIONS. The Placement Office maintains a file of housing available in the vicinity of the University for students seeking accommodations. The University provides 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 graduation, 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.
The student should think about occupational choice from the time he enters college. A counselor is available to assist students in considering various alternatives and in finding sources of information. This office maintains a library containing occupational and employer information, as well as guides to graduate programs and testing information.

Recruiters visit the campus throughout the year. While seniors are urged to arrange for a number of interviews, it is also wise for other interested students to participate. 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.

UNIVERSITY COUNSELING 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 while in college. The Center is staffed by a professionally trained psychologist. There is no charge for Center services.

HONOR SYSTEM. Until 1972 the 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 and stealing.

George Mason College 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 without question as truth and that any violation of a student’s word is an offense against the Honor Code.

All students in the University have the duty as participating members of this community to report to a member of the Honor Committee any violations of the Honor Code. This duty is of importance not only because it enforces the Honor Code, but also because it gives each student the opportunity to express his respect for personal integrity and an honest academic community. 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.
The student body of George Mason University values its unique right and responsibility of self-government and academic honor.

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 sponsored presently 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 takeovers 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.

FIREARMS. The unauthorized possession, storage, display, or use
CAMPUS AND FACILITIES

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 SALESemen. 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 Publication 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.

ENFORCED WITHDRAWAL. The University may impose enforced withdrawal as a penalty for habitual delinquency in class, habitual idleness, or any other fault which prevents the student from fulfilling the purposes of enrollment in the University.
Entering George Mason University

Nature of Announcements
Admission Requirements
Registration
Fees
Financial Aid
Veterans' Affairs
NATURE OF ANNOUNCEMENTS

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

UNDERGRADUATE ADMISSION REQUIREMENTS

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

To be assured of consideration, applications should be submitted no later than June 1. Students with honor grades in secondary school and good Scholastic Aptitude Test scores or the equivalent taken in May of their junior year may qualify for early admission decisions on the basis of a three-year record. Regular admission decisions will normally be made after the first-semester grades of the senior year and all necessary prescribed test scores have been received by the Admissions Office. Admission is contingent upon satisfactory completion of the requirements discussed in this section and successful completion of the senior year of high school.

All freshman candidates for admission are required to take the Scholastic Aptitude Test given by the College Entrance Examination Board, or its equivalent. December or January tests are recommended. Applicants must register at least three weeks before the testing date by mailing a registration form and fee to a College Board Office*, or through their area high school. The examination will be given in various test centers distributed throughout the United States and overseas. Both descriptive information about the test and registration blanks are available without cost to applicants. Requests should be addressed to either of the Board’s offices.*

The English Department strongly suggests that students in the arts, sciences, and elementary education programs take the language achievement tests of the College Entrance Examination Board. Scores of these tests may be used for advanced placement of students by the English Department.

Applicants for admission are considered individually, in accordance with the following criteria:

1. Evidence of academic achievement and promise, with considerable facility in the use of the English language and with an understanding of the fundamental mathematical processes.
2. Evidence of good character and acceptable social habits.
3. Complete secondary school record, examination results, and recommendations from schools.

*Address of the College Board Offices: Box 592, Princeton, New Jersey, 08540, or Box 1025, Berkeley, California, 94701.
GEORGE MASON UNIVERSITY

The following general requirements are set forth for the guidance of students interested in admission: The applicant must be at least 16 years of age and a graduate of an accredited high school or preparatory school with graduation based on no fewer than fifteen units (see specific subject requirements below). Applicants should rank in the upper half of their senior class. A personal interview is not required unless requested by the Director of Admissions.

In summary, a complete application includes (1) a properly executed application form, (2) a non-refundable application fee of $10.00 accompanying the application, (3) a transcript of grades from secondary school and all colleges attended, and (4) a record of the scores on the Scholastic Aptitude Test for the College Entrance Examination Board.

Candidates who are approved for September admission must notify the University not later than May 15 whether they wish to accept or decline this offer. Failure to comply may affect adversely the candidate's reserved space for attendance.

The University reserves the right to withdraw any offer of admission if applicant fails to satisfy all requirements prior to closing of spring or fall registration.

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.

MEDICAL REPORT. All students approved for admission are required to complete a health form provided by the University.

ADMISSION FROM SECONDARY SCHOOL

Arts, Sciences and Elementary Education

For admission to the arts, sciences, and elementary education programs, an applicant must take the Scholastic Aptitude Test given by the College Entrance Examination Board and must present not less than fifteen (15) units of high school work in the following academic fields:

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<tr>
<th>Subject</th>
<th>Minimum Total</th>
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<tbody>
<tr>
<td>English</td>
<td>4 units</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 units(^1)</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2 units(^2)</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1 unit</td>
</tr>
<tr>
<td>Laboratory Science—Biology, Chemistry, or Physics</td>
<td>1 unit</td>
</tr>
<tr>
<td>Electives</td>
<td>4 units</td>
</tr>
<tr>
<td>Minimum Total</td>
<td>15 units</td>
</tr>
</tbody>
</table>

1. These units must be selected from Algebra I, Algebra II, geometry, trigonometry, probability, and elementary calculus.
2. No credit is allowed for less than two units in a foreign language.
ENTERING GEORGE MASON UNIVERSITY

Two Year Engineering

For admission as a student in the two-year engineering program, an applicant must present sixteen (16) units from high school in the following fields:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3½</td>
</tr>
<tr>
<td>History</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5½</td>
</tr>
</tbody>
</table>

The experience of the University has shown that certain subjects are more useful to the engineering student and their inclusion in the high school programs of applicants is strongly recommended. These subjects include: additional mathematics, American and modern European history, English and American literature, physics, chemistry, biology, geography, foreign languages, and mechanical drawing.

ADMISSION FROM ANOTHER COLLEGE

George Mason University accepts qualified students by transfer from other colleges. An applicant for admission who has attended an institution of collegiate rank for any period of time should request the registrar of each institution he has attended to send an official transcript of his record to the Office of Admissions, George Mason University. A complete secondary school record will also be required. Normally, transfer students will be expected to meet the University’s requirements governing initial admission from high school. An applicant may be considered for transfer only if he is entitled to an honorable dismissal without social or academic probation and only if he has an average of at least "C" in the institution from which he wishes to transfer. A student who has been suspended or dropped from another institution for scholastic deficiency or other reasons can not be considered for admission. Transfer students should note the requirements shown on page 38 under the heading Credits Earned at Other Colleges.

Transfer students may be required to present Scholastic Aptitude Test scores of the College Entrance Examination Board before approval for admission.

FOREIGN STUDENTS. Applications are considered from students who are not United States citizens under the following conditions:

3. These units must be two of algebra, one of plane geometry and ½ unit of advanced mathematics — trigonometry, solid geometry, or advanced algebra.
4. Chemistry and physics are recommended.
5. Not more than four units of vocational subjects relevant to engineering will be accepted.
1. That they are currently residing in the United States on a bona fide student or other visa.
2. That they have completed the TOEFL (Test of English as a Foreign Language) and attained a score of not less than 550.
3. That they make the necessary arrangements for a personal interview with the Director of Admissions.

CONDITIONAL ADMISSION. Applicants for admission to George Mason University who are offered admission on a "Conditional" status, must complete a full program of course work (12-17 credit hours each semester) during the first year of attendance and maintain an overall "C"/2.000 average. The program must be accomplished in the regular sessions, not to include the Summer Sessions. Failure to attain the necessary average will result in academic dismissal.

REGISTRATION

Applicants seeking membership in the University, having been accepted for admission by proper admitting authority, should present themselves to the Dean of his College or his authorized representative on the date specified in the Announcements of the University. Applicants must also attend and participate in the orientation program announced in the calendar. Each new and returning student is given written instructions for the registration procedure. He is responsible for following and completing the process properly. The student who fails to do this will not be a Registered Student.

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 subscribe myself a student of George Mason University. I enroll in the University with a serious desire to reap the benefits of its instruction and 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.

PREREGISTRATION. Preregistration is conducted near the end of each semester for those students currently enrolled and who intend to return for the next semester. Students who preregister for a regular semester of the academic year must pick up their course schedules by the end of the last business day before the beginning of regular registration. Preregistered students failing to pick up their course schedules within the prescribed period will have their preregistration cancelled.

DELAYED REGISTRATION. Any student who fails to present
ENTERING GEORGE MASON UNIVERSITY

himself at the time specified for registration will not be permitted to matriculate unless he can explain his delay to the satisfaction of the Dean of his College 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 Dean of his College 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.

CLASSIFICATION AS A VIRGINIA STUDENT. A student is classified in-state if the parent or legal guardian has been domiciled in the State of Virginia for one full and continuous year prior to registration AND has paid Virginia State Income Taxes for the same period of time. It is the domicile of father/guardian and his payment of income taxes that is basic in determining classification as a Virginia student. The mother’s domicile applies only when guardianship or custody shifts by virtue of father’s death, legal separation or divorce. Any student in doubt about his status as a Virginia resident should contact the Admissions Office.

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</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12 or more semester-</td>
<td>290.00</td>
<td>650.00</td>
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<tr>
<td>hours) per semester</td>
<td></td>
<td></td>
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<tr>
<td>Tuition, part-time</td>
<td></td>
<td></td>
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<tr>
<td>(11 semester-hours</td>
<td></td>
<td></td>
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<tr>
<td>or less) per semester</td>
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<td></td>
</tr>
<tr>
<td>per hour</td>
<td>25.00</td>
<td>55.00</td>
</tr>
<tr>
<td>Comprehensive Fee,</td>
<td>30.00 (a)</td>
<td>30.00 (a)</td>
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<tr>
<td>per semester</td>
<td></td>
<td></td>
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<tr>
<td>Laboratory Breakage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit</td>
<td>5.00 (b)</td>
<td>5.00 (b)</td>
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<tr>
<td>Diploma Fee (Seniors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only)</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Special Registration</td>
<td>15.00 (c)</td>
<td>15.00 (c)</td>
</tr>
<tr>
<td>Fee</td>
<td>(d)</td>
<td>(d)</td>
</tr>
<tr>
<td>Private Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>15.00 (e)</td>
<td>15.00 (e)</td>
</tr>
<tr>
<td>Medical Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Fee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Students enrolled for six semester-hours or less are required to pay one-half of the Comprehensive Fee.

(b) Chemistry only. Same Laboratory card may be used for both semesters.

(c) See Application, pp. 22, 23.

(d) $75.00 for one half-hour lesson per week per semester. Fee is non-refundable after 30 calendar days. Refund prior to completion of 30 days is $50.00.

(e) Payable at time of Application for Degree.
PAYMENT OF TUITION AND FEES. Tuition and fees are due and payable at the Business Office on or before August 25, 1972 and January 12, 1973. No student is permitted to register for classes until satisfactory financial arrangements have been made with the Business Office (Cashier). *Those who pay after the “due date” will be charged a late fee of $5.00 per day not to exceed three days.*

All students are urged to make payments (whether by mail or in person) by personal check, money order or bank draft.

Failure to make any tuition payment on or before due date results in a late charge of $5.00 per day, up to three days. Students who have not made 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 probation period the student will be suspended for the remainder of the semester.

DEFERRED PAYMENT PLAN. There is a deferred payment plan 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 indicated:

**First Semester:** Second and third payments due October 12 and November 16, 1972.

**Second Semester:** Second and third payments due March 2 and April 2, 1973.

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.

*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 marked “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.

REFUNDS. A student withdrawing within five class days following registration shall have tuition and comprehensive fee 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. The refund period ends two months from last registration day for the semester. 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 to cover breakage or loss of equipment by the student. If breakage exceeds $5.00, the student will be required to reimburse the University. 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, 1973).

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

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

MOTOR VEHICLE REGISTRATION FEES. 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, page 16.)

FINANCIAL AID

George Mason University has a limited amount of financial aid available, which is administered by the Financial Aid Office. This aid consists of scholarships, grants, loans, and employment. Financial Aid awards are based primarily on financial need, and secondarily on scholarship.

To apply for aid, a student who has been accepted for admission to George Mason University should consult with the Financial Aid Officer and then file an application. In addition, a "Parents' Confidential Statement" or "Student's Confidential Statement" in support of application for financial aid must be filed with the College Scholarship Service.

All new applications for financial aid (with the exception of the State Teachers Scholarship and the Law Enforcement Education Program) and applications for the renewal of financial aid, are due by May 1. Although awards are made for one year beginning in the fall, a limited number of applications for the spring semester may be considered if submitted by November 24.

FEDERAL FINANCIAL AID PROGRAMS

George Mason University participates in several federally supported programs of student financial aid. The following are available to eligible students.
THE NATIONAL DEFENSE STUDENT LOAN PROGRAM. The University makes available to qualified students, long term, low-interest loans from the federally-sponsored National Defense Student Loan Program. Repayment begins nine months after graduation and may be deferred if one enters graduate school, the Peace Corps, VISTA, or military service. A borrower from this fund who becomes a full-time teacher in an elementary or secondary school or in an institution of higher education may have a portion of his total loan cancelled.

EDUCATIONAL OPPORTUNITY GRANT PROGRAM. There are available a limited number of direct grants to undergraduate full-time students with exceptional financial need who require such assistance to attend college and who show academic promise. To receive this grant, a matching scholarship or loan must be awarded to the student.

THE COLLEGE WORK-STUDY PROGRAM. There are available funds to provide work opportunities to full-time students from low-income families who need earnings from part-time work to help meet college expenses. An aid applicant, who is eligible for this assistance and who indicates a desire and willingness to work will be considered for Work-Study job placement.

U.S. LOAN PROGRAM FOR CUBAN STUDENTS. Long-term, low-interest loans are available to Cuban nationals residing here who are unable to receive support from sources within Cuba as a result of actions by the Cuban government, and who are without sufficient resources in the United States to finance their education. Repayment begins nine months after graduation and may be deferred if one enters graduate school, the Peace Corps, VISTA, or military service. A borrower from this fund may have a portion of his total loan cancelled if he becomes a teacher in public or non-profit elementary or secondary schools or institutions of higher education.

LAW ENFORCEMENT EDUCATION PROGRAM. This program provides loans and/or grants to state and local law enforcement personnel and to students who promise to enter the law enforcement field (police, corrections, etc). Due to limited funds, students in police work or in the Law Enforcement major field of study will receive first priority. Additional information may be obtained from the Financial Aid Office.

STATE FINANCIAL AID PROGRAMS

The state of Virginia makes available three sources of financial aid for Virginia residents. Most programs require students to be enrolled full-time.

VIRGINIA LOANS. The state provides funds to be used for long term, low interest loans for eligible students.
ENTERING GEORGE MASON UNIVERSITY

VIRGINIA SCHOLARSHIPS. These scholarships are for students who demonstrate financial eligibility, and have established a record of academic and personal achievement.

STATE TEACHERS' SCHOLARSHIP LOANS. These scholarships are loans in the amount of $350.00 per year which are cancelled at a fixed rate for each year of teaching in Virginia schools after graduation. Applicants must be Virginia residents, be recommended by the Teacher Education Committee, and meet the qualifications set by the State Board of Education. Application forms are available in the Financial Aid Office, and should be returned no later than April 21 for the following academic year.

VIRGINIA STATE LAW ENFORCEMENT SCHOLARSHIP PROGRAM. A law enforcement officer of Virginia, enrolled in a program leading to a degree in law enforcement, may apply for a tuition refund to the Virginia Department of Education. One-half of the tuition costs, not to exceed $40.00 per course, may be received upon completion of the course, and the remaining one-half received after one year of service as a law enforcement officer.

For further information contact the Financial Aid Office of the University or contact the Department of Education, Ninth Street Office Building, Richmond, Virginia 23219.

SCHOLARSHIPS

GEORGE MASON UNIVERSITY FOUNDATION, INC. Certain funds donated to the George Mason University Foundation, Inc., are designated for scholarships and are held in trust by the foundation. Income from these gifts is used for general scholarships. This fund is administered by the Board of Trustees of the Foundation. Application for loans should be addressed to the Secretary-Treasurer of the Foundation, who is located in the University Business Office.

FULLBRIGHT-HAYS AWARDS. Students seeking information regarding these awards which provide funds for pre-doctoral study or research abroad should contact Dr. Angela Khoury, George Mason University Fulbright Program Advisor. Faculty members nominate promising students.

WOODROW WILSON FOUNDATION. The Woodrow Wilson Foundation provides funds for graduate fellowships to students planning college teaching careers in a liberal arts field. Seniors interested in applying for these highly competitive grants must be nominated by one of their professors in October. Consult the departmental advisor or the local Woodrow Wilson campus representative for further information.
GEORGE MASON UNIVERSITY

EMERGENCY LOAN FUND

Funds are available from which a student may borrow up to $75.00 for a period of forty-five days for emergency situations. Inquiries should be made at the Financial Aid Office.

VETERANS' AFFAIRS

The Recorder's Office is the University's liaison with the Veterans Administration in matters concerning educational benefits to veterans and their dependents.

Veterans eligible for educational benefits under Public Law 89-358 (Peacetime G.I. bill) must make application to their nearest VA Regional Office for approval of their program and authorization for benefits. It is important that this be done in advance of taking up residence so that programs may be approved before funds are needed. Application forms for educational benefits are available from the Recorder's Office, or at the Veterans Administration Regional Office.

Persons eligible for benefits under Public Law 634 (War Orphans Program) must also make application to their nearest Veterans Administration Regional Office. The Recorder's Office assists the eligible person in his relations with the Veterans Administration upon his authorization for benefits and enrollment in the University.

Eligibility for full-time institutional training consists of twelve semester-hours, three-quarter time consists of nine to eleven semester-hours, half-time consists of six to eight semester-hours. Payments to students enrolled for less than half-time are computed on the basis of tuition fees and charges. Payments for attendance at summer sessions are determined on the basis of an accelerated program.
"A college or university is reflected in the eyes of people in different ways— to some, it is academic programs; to others, it is students; to still others, it may be buildings. These separate images must merge and, in the ultimate analysis, the university is people."

DR. ROBERT C. KRUG
Dean of the Faculty and Dean of the Graduate Program
INTRODUCTION

It is primarily the student's responsibility to familiarize himself with the regulations and academic policies of George Mason University. This includes familiarity and compliance with all rules, regulations, and requirements. If doubt should arise with regard to any matter, it is the responsibility of the student to consult his faculty adviser or the Dean of his College.

While the University appreciates the need on the part of many students to assume part-time employment in order to meet their living expenses, such outside commitments must not take priority over academic responsibilities. Accordingly, it is strongly urged that a student who is employed more than 20 hours a week not attempt a full-time academic load, and that a student who is employed more than 40 hours a week not attempt more than six semester-hours. A student who fails to observe these guidelines may expect no special consideration for academic problems arising from the pressures of outside employment.

CREDIT AND GRADES

GRADES AND GRADE POINTS. University course work is measured in terms of quantity and quality. The semester-hour is the unit of credit and the number of semester-hours of credit is a measure of quantity. The grade is a measure of quality. The University recognizes four grades above passing: "A," "B," "C," and "D." Grade "F" signifies that the work was failed. In those instances in which a student otherwise passing a course is for some cause beyond his reasonable control unable to complete the work of that course on schedule, the instructor may assign a temporary grade of "I" (Incomplete). Any "I" grade not removed from the record by the end of the following semester will be automatically changed to "F." A student who has received an excuse by the Dean of his College to be absent from the final examination may receive a grade of "AB." The "AB" automatically becomes "F" within ten days after the date of regular examination if the delinquent testing has not been completed. The grade of "SP" will be given by the Dean of the respective College for students faced with a delinquency because of very special circumstances such as a major illness.

To compute an average of the quality of work for a semester or for an entire program, grade points for each semester-hour are assigned on a scale of 4 for "A," 3 for "B," 2 for "C," 1 for "D," and 0 for "F." A grade point score is computed by multiplying the value of the letter grade by the number of credits for the course. As an example, a student receiving an "A" in the first semester of English (a three-semester-hour course), receives twelve grade points. The grade point average is computed by dividing the number of grade points earned by the number of semester-hours attempted.
ACADEMIC REGULATIONS

Academic achievement of a student in a course is rated as follows:

\[
\begin{align*}
&A' = 90 - 100 \text{ (excellent)} \\
&B' = 80 - 89 \text{ (good)} \\
&C' = 70 - 79 \text{ (satisfactory)} \\
&D' = 60 - 69 \text{ (poor)} \\
&F' = \text{Failure}
\end{align*}
\]

CREDIT WITHOUT GRADE. Each student who is a candidate for a degree at George Mason University, having earned a minimum of fifty-four semester-hours and being in good academic standing, may elect to take not more than two one-semester courses for credit but without grade. The courses selected may not be within the field of major concentration and may not be advanced in satisfaction of any degree requirement except that requiring a total of 120 semester-hours of credit for graduation and may not include a course for which a previous grade of “F” has been received. To gain admission to a course under this provision, a student must meet the stated prerequisites for entry and secure in advance of enrollment permission of the instructor. Permission Request Forms are available in the Recorder’s Office. Any student so enrolled will be regarded as a regular member of the class for all academic purposes, and to receive hours of credit toward graduation must demonstrate, in the judgment of the instructor, attainment of a passing level of achievement. Students who are majoring in the field will be given enrollment priority over students entering for credit without grade. Hours earned in such courses will not enter into determination of the student’s grade point average. Courses taken for credit without grade are not considered when computing a student’s grade point average.

SEMESTER-HOUR AND COURSE LOAD. A semester-hour, the unit in which courses are measured, is defined as one hour per week of lecture recitation or not less than two hours per week of laboratory work throughout a semester. Although twelve semester-hours per semester represents a minimum full-time load, a student is expected to carry not less than fourteen nor more than seventeen semester-hours of work. A load in excess of seventeen hours must be approved by the Dean of the respective College or his representative. The student course load must average at least fifteen hours per semester to qualify for graduation within four years. A student must take one-third of the total contact hours after 12 o’clock noon. Classes and laboratories must be scheduled over the full week. A double number separated by a hyphen (Biology 103-104) indicates that the course extends through two semesters. See Introduction, Courses of Instruction, page 53.

AUDIT. Auditing a course requires the permission of the chairman of the department in which the course is offered. This permission must be secured in advance of enrollment. A student may not change from credit to audit status after the Add period is completed. A previously audited course may not be taken for credit at a later date. However, a student
GEORGE MASON UNIVERSITY

may audit a course which he has previously taken and passed. The usual University fees apply to audit status.

REPEATING A COURSE. A student who has passed a course with a grade of "C" or better is not permitted to repeat that course. In cases where courses are repeated, the following conditions apply:

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

CHANGE OF COURSES. In order to drop and/or add a course, a student must first obtain the written permission of his faculty adviser and 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 seven 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 student who discontinues a course without permission of the Dean of his College will receive a grade of "F" in that course.

ATTENDANCE. Students are expected to attend the class periods of the courses for which they are registered. Absence from several meetings of a course may limit a student’s performance and thus result in a lower grade; however, absence from a course per se may not be considered reason for awarding a lower grade than the student’s achievement in that course may warrant.

REPORTS AND EXAMINATIONS

MID-TERM PROGRESS REPORTS. Progress reports will be due from the faculty at the end of the eighth week of classes in the first semester. These reports will be processed and distributed by the end of the ninth week so that six weeks of the semester will remain during which time a student noted to be in academic difficulties may act to repair his standing. The progress reports will show for each course a symbol of “U” or “S”. The symbol “U” will be used for reporting a standing normally associated with the letter grades of “D” or “F”. All freshmen and all students on academic probation will receive a mid-term progress report during the first semester of the academic year; other students will receive mid-term progress reports during the first semester only in a course in which the instructor estimates the student is earning a “D” or “F.”

REPORTS. Reports are sent at the end of each semester to the
parent or guardian of each student unless the student is over 21 years of age or married, in which case the reports are sent directly to the student.

FINAL EXAMINATIONS. Written examinations are held at the end of each semester except in predominantly laboratory courses. 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 Dean of the respective College.

ABSENCE FROM FINAL EXAMINATIONS AND SPECIAL EXAMINATIONS. Absence from final examination will not be excused except for sickness on the day of the examination attested by a physician’s certificate, or for other cause approved by the Dean of the respective College. 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.

RE-EXAMINATION. Re-examinations are not permitted, but students otherwise in good standing are permitted to repeat a course in which they have received a grade of D or F.

DEFICIENCIES

PROBATION AND SUSPENSION FOR ACADEMIC DEFICIENCY

A student who maintains a grade point average of 2.000 for all work attempted is in satisfactory academic standing within the University. A student is placed on probation when his cumulative grade point deficiency falls below the level set by the University. He will be suspended from the University if his performance continues to be unsatisfactory or if he displays grossly inadequate performance during a single semester. A table of academic deficiencies used at George Mason University to determine the liability of a student to academic probation or suspension may be obtained from the Recorder’s Office. For computation of grade points, see page 30.

The following practices guide the imposition of probation or suspension:

PROBATION

(1) Probation is used to warn the student that his performance is below the grade point average of 2.000 required for graduation. It is desirable for the student to remove his probation in one semester.

(2) A student in freshman or sophomore status (less than fifty-four semester-hours of credit) is ineligible to hold an elected or appointed
office in any student organization or activity of either a governmental, athletic or managerial character, if his cumulative grade point average is less than 2.000. Any student on probation is not only ineligible to hold an elected or appointed office but is also ineligible to participate in any athletic or other activity representing the University on either an intercollegiate or club level and/or to serve as a working staff member of any student organization. It is the responsibility of the individual student to notify his organization when he becomes ineligible. Authority is vested in the Dean of the respective College, however, to remove the restriction on activities, in whole or part, for individual cases.

(3) The academic record of a student who has been placed on probation is stamped “probation.” If rule (2) or (3) in the section entitled Suspension is applied, the student’s record will be stamped “special probation.”

(4) The student who is carrying less than twelve semester-hours of work and whose total hours attempted at George Mason University including the current semester are less than twelve will have his record marked “special probation” or “probation,” whichever is appropriate, if his cumulative grade point average is below 1.000.

SUSPENSION

(1) Suspension is a state of enforced withdrawal from the University and is imposed upon any student whose cumulative grade point average falls below an acceptable level. No course credits earned during the period of suspension from George Mason University will be accepted for the degree program. In addition, a student will be suspended whose record has been marked probation (or special probation as defined below) for three consecutive semesters, except as provided below. The three semester probation rule does not apply to a student whose total grade points for all hours attempted falls below the probationary standards of George Mason University.

(2) No student on probation will be suspended at the end of a semester in which he earns a grade point average for that semester of 2.000 or higher.

(3) No freshman will be placed on suspension without having been on probation for the immediately preceding semester.

(4) The record of a student to whom rule 2 or 3 of this section has been applied will be stamped “special probation” and that designation shall have the same effect as “probation.”

(5) A student who has failed to earn at least six grade points in a regular semester, no matter what his grade point total, will be suspended, except that freshmen will not be subject to this rule.

READMISSION AFTER SUSPENSION

(1) Normally, a student on suspension for the first time may establish his eligibility for probationary readmission only if he attends the Summer Session of this University and displays satisfactory progress by
earning a minimum of eight semester-hours, on which he achieves an average grade of "C" while passing all work attempted. If the student chooses to carry more than eight hours, all work attempted must be passed, and the student must achieve an average grade of "C" on all work attempted. Courses taken to establish eligibility for readmission to George Mason University must be approved by the Dean of the respective College.

(2) Under special circumstances, a student on suspension for the first time may petition for readmission after the lapse of one calendar year, provided that he demonstrate that his circumstances have so changed as to make likely the successful continuation of his college program.

(3) A student who has been readmitted under either of these procedures will be placed on probationary status (as described under item 2, Probation, p. 33).

(4) A student who has been reinstated after suspension and is subsequently suspended again will not be considered for readmission until after two calendar years have elapsed.

(5) No course credits earned during the period of suspension from George Mason University will be accepted for the degree program.

ACADEMIC DISMISSAL. Failure to complete the requirements outlined in Conditional Admissions results in academic dismissal. A student on academic dismissal may not be considered for readmission until two calendar years have elapsed at which time the student may petition for readmission.

EFFECT OF ATTENDING SUMMER SESSION. The student's academic status shall not change as a result of his attending the Summer Session at George Mason University, except in those cases where students are seeking to remove the academic suspension in accord with George Mason University regulations (see Rule (1) under Readmission after Suspension). However, in cases of students requiring certification of good standing for participation in activities or for transfer to another school, the Registrar is authorized to determine the student's standing on the basis of all hours attempted at George Mason University.

VOLUNTARY WITHDRAWAL. An official application form to withdraw must be obtained from the Recorder's Office, and must be approved in writing by the Dean of the respective College. A student under twenty-one years of age must have parental approval for such withdrawal. To clear the student's record, the application must then be endorsed by the Recorder, Business Office, and if the student is enrolled in a laboratory course, by the chairman of the science department. When complete, the withdrawal form must be deposited with the Recorder.

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. All courses that are marked withdrew failing will be figured into the total hours attempted. (See Grade and Grade Points, pp. 30, 31.)
GEORGE MASON UNIVERSITY

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

READMISSION AFTER VOLUNTARY WITHDRAWAL. A student who withdraws with “WF” in half or more of his courses must qualify for readmission in the same way as a suspended student. A student who withdraws with “WP” in half or more of his courses and whose grade point average is more than 2.000 can be readmitted by the Director of Admissions. A student who withdraws with “WP” in half or more of his courses and whose grade point average is less than 2.000 may be required by the Dean of the respective College to attend the Summer Session and complete satisfactorily a prescribed number of approved courses; his readmission will be considered on the basis of his previous record as well as his Summer Session courses.

GENERAL READMISSION. Students not in continuous registration, summer sessions excluded, must notify the Admissions Office 60 days in advance of registration for readmission.

STANDING

FOREIGN LANGUAGE PLACEMENT

All entering freshmen who intend to continue at George Mason University the foreign language studied in high school are required to take a foreign language placement test. These tests will be administered to students entering in the fall of 1972 on Saturday, May 27 and Monday, August 28. Students who intend to take the placement test must register no later than four weeks in advance with the Department of Foreign Languages.

The following guidelines apply to students enrolling in the foreign language program:

1. The 151-152 courses are reserved for students who present no entrance credit in the language and for students who have not taken the language within two years of the time of enrollment in the course;

2. Students who present two or more entrance credits in a language taken within two years prior to enrollment in the college course and who wish to continue that language will be placed in 153 or 251, depending upon their scores on the foreign language placement test. If their scores place them beyond 251, they will have fulfilled the foreign language requirement by examination;

3. Transfer students who have not received credit for college-level foreign language study will be placed according to (1) or (2) above, whichever is applicable. Transfer students who have received credit for college-level foreign language study do not
ACADEMIC REGULATIONS

take the placement test; they automatically enter the level immediately beyond the one for which they receive transfer credit.

ADVANCED PLACEMENT PROGRAM WITH CREDIT

First semester freshmen entering George Mason University who have completed advanced level courses in secondary schools and who have passed College Board Placement Examinations with scores of 5, 4, or 3, may enroll for those higher level courses for which the department concerned determines them to be qualified. Those who have ratings of 5 or 4 will be granted up to a maximum of thirty hours credit (without grades). Those who have ratings of 3 may be granted up to thirty hours credit (without grades) upon recommendation of the department concerned and with the approval of the Dean of the respective College, but the total number of hours granted may not in any instance exceed thirty. In all instances, advanced credit earned in this manner by entering freshmen will be counted toward or will fulfill any pertinent university or departmental graduation requirement.

ADVANCED PLACEMENT PROGRAM WITHOUT CREDIT

Entering first semester freshmen who do not qualify for advanced placement with credit may establish their eligibility for admission to higher level courses on the basis of placement examinations prepared and administered by those departments desiring to participate. Transfer students may qualify to meet graduation requirements or requirements for a major field in courses listed in the catalog by examinations given by departments. All such examinations shall conform to University policy, shall be adequate to evaluate the competence and preparation of students in their respective areas, and shall afford a reliable basis for assigning students to advanced courses.

CREDIT AND ADVANCED PLACEMENT BY EXAMINATION

Proficiency examinations are offered to incoming freshmen degree candidates in a number of courses normally taken during the first two years. Examinations in courses in English, foreign languages, history, and mathematics will usually be announced by the appropriate departments. The foreign language placement test for incoming freshmen also serves as a proficiency examination. A satisfactory score on such an examination will afford a student credit for the course in question.

On the basis of examinations administered to candidates presenting some evidence of qualification, regularly enrolled students may be granted up to thirty semester-hours of undergraduate credit for other courses in the George Mason University curriculum. Credit is recorded for grades of
GEORGE MASON UNIVERSITY

“C” or above, but does not affect the student’s grade point average. In addition:

(1) A student may not earn credit by examination in a course in which he is enrolled beyond the time allotted for adding courses in that semester, or in a course which he has already audited or failed at George Mason University.

(2) A student may not earn by examination part of the thirty hours which transfer students are required to complete at George Mason University to earn a degree.

(3) Credit may not be earned by examination in foreign language at the 100 level but may be earned for foreign language courses at the 200 and 300 level.

These examinations will conform to University policies, be adequate to evaluate the competence of students, and afford a reliable basis for assigning students to more advanced courses.

CREDITS EARNED AT OTHER COLLEGES

The credits of students transferring from other institutions will be tentatively evaluated upon registration. In general, credits are accepted from institutions that are accredited by the appropriate regional association provided they carry a grade of “C” or better and are comparable to courses offered at George Mason. If such institutions are not accredited, the transcript information may be used for purposes of advanced placement, and transfer credit as such will be recommended after the performance of the student at George Mason has been established. Generally, no more than half of the total required semester hours in a student’s George Mason baccalaureate program may be transferred from a junior or community college. A maximum of six semester-hours may be transferred from correspondence courses sponsored by regionally accredited institutions. Permission to take courses at other colleges and universities, in extension centers, and by correspondence must be approved in advance by the Dean of the respective College.

A student who expects to take summer courses at other colleges and to transfer credit to this University must submit his request to the Dean of the respective College by June 1. Catalog numbers and descriptions of courses shall be submitted with the request.

Military service courses represent special cases and generally no credit is given.

A student may not assume that credit will be given for work at other institutions until he has an official signed statement from the office of the Dean of his College.

It is the responsibility of the student to see that the Recorder’s Office receives an official transcript of work taken elsewhere before his record here can be credited.

CLASS STANDING

The minimum number of credits required for advancement to each
class is as follows: sophomore, twenty-four semester-hours; junior, fifty-four semester-hours; senior, eighty-four semester-hours. A minimum of one hundred twenty semester-hours is required for graduation.

DECLARATION OF A MAJOR

SELECTION OF A MAJOR. In order to plan a sound academic program the student should select a major as soon as practical, and this selection should be made no later than four weeks before the end of the sophomore year. For the declaration of a major, the student should confer with his departmental chairman and/or faculty adviser and file the necessary form.

CHANGE OF MAJOR. A student who wishes to change his major should obtain the necessary form from his faculty adviser.

DOUBLE MAJOR. A student who desires to graduate from George Mason University with a Bachelor of Arts degree, or a Bachelor of Science degree, in two subjects having established degree programs must meet departmental requirements for admission to the major in both fields. He must present at the time of his request a cumulative grade point average of at least 2.800.

The applicant should present to the chairmen of the departments involved a program showing in detail the curriculum he will pursue to graduation. This program must be approved by the departments involved and by the Dean of the respective College. The departments involved and the Dean must also approve all changes made thereafter.

In order to graduate with a double major, a student must complete all departmental requirements for both subjects. The student may begin the program at any time that permits its completion prior to the date of the student’s contemplated graduation.

HONORS

THE DEAN'S LIST. A student in the University is placed on the Dean's List of Distinguished Students if he has passed at least fourteen semester-hours of work in the preceding semester, without failure in any course, and with a grade average in all courses of at least 3.000.

GRADUATION WITH DISTINCTION. George Mason University will recognize a student as graduating with distinction who has a grade point average of 3.000, with high distinction a student with grade point average of 3.500, and with highest distinction a student with a grade point average of 3.800, and such recognition shall be limited to students who have had sixty hours or more at George Mason University. (This distinction shall appear on the graduation program and on the student's transcript.) For those students entering before September 1972, please refer to previous catalogs in regard to graduation with distinction.
Academic Programs and Degree Requirements

General

College of Arts and Sciences
  Bachelor of Arts
  Bachelor of Science
  Engineering

College of Professional Studies
  Bachelor of Science in
  Business Administration

Bachelor of Science in Education
  Elementary Education
  Health and Physical Education
GENERAL

Various academic programs are available to students at George Mason University. Courses of study leading to the Bachelor of Arts degree are available with majors in sixteen areas: biology, chemistry, economics, English, French, German, government and politics, history, Latin American studies, mathematics, music, philosophy, physics, psychology, Spanish, and sociology. Courses of study leading to the Bachelor of Science degree with majors in biology, business administration, economics, law enforcement, mathematics, physics, social welfare, a Bachelor of Science in Chemistry (B.S. Chern.), and a Bachelor of Science in Education (B.S. Ed.) with the major in elementary education or a major in health and physical education are also available. For information regarding declaration of a major, see Academic Regulations, page 39.

In consultation with his faculty adviser, the student should plan his academic program to meet the general degree requirements stated below and the specific requirements within a major field. The role of the faculty adviser is to help a student in the planning of his academic program. It must be emphasized, however, that the main responsibility rests with the student to read the catalog and to know the requirements for his specific baccalaureate degree.

RESIDENCE REQUIREMENTS. At least one-fourth of the total semester-hours presented on the degree application must be completed at George Mason University; and these shall include at least twelve semester-hours of advanced-level courses in the major program. Moreover, except with special permission of the Dean of his College, the student’s final one-fourth of his college study must be completed here.

ACADEMIC ACHIEVEMENT. To qualify for a baccalaureate degree a student must be in good standing and must have satisfied all requirements for his program. In addition, he must have maintained a 2.000 (C) average in his major, an average grade of 2.000 (C) on all courses presented for the degree, and a cumulative grade point average of 2.000 (C) on all work attempted at George Mason University.

A Graduation Appeals Committee has been established to consider appeals in writing from students who may be two quality grade points and/or one semester-hour short of meeting degree requirements; to consider written appeals from students who have lost credit in transferring from a quarter-system; and to consider written appeals from students who have failed to meet certain area requirements.

CATALOG REQUIREMENTS FOR GRADUATION. A candidate for a degree may elect to graduate under the provisions of the catalog under which he entered or may elect to graduate under the provisions of a catalog subsequent to his entry if the student has been enrolled in a continuous progression from date of entry to the receipt of a degree. (Summer sessions and one semester absences are excluded.) Any student who fails to register for two or more consecutive semesters must meet
either the requirements of the catalog under which he entered or the requirements in effect at the time the student shall be graduated.

APPLICATION. Students who expect to complete graduation degree requirements in 1972 must secure an Application for Degree Form from the Recorder's Office, complete, and return it 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. A new $5.00 fee is required each time a new application for graduation is submitted.

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

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.

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.

SECOND BACHELOR'S DEGREE. A second bachelor's degree may be earned, either concurrently or sequentially, by completing all requirements for that degree and by presenting on the degree application an additional thirty semester-hours of credit earned at George Mason University not presented toward the first degree.

GRADUATE STUDIES. Information concerning graduate programs is presented in a separate catalog which may be obtained from the Graduate Admissions Office. Graduate programs are available at George Mason University in biology, business administration, elementary education, guidance and counseling, school administration, school supervision, secondary education, history, mathematics, and psychology.

SUMMER SESSION. Information concerning George Mason University Summer Session is presented in a separate catalog which is available in March from the Admissions Office.
College of Arts and Sciences

BACHELOR OF ARTS

Semester-Hours

I. Arts and Literature .................................. 12-30
   a. English Composition (6)
   b. Literature (6)
      This requirement must be met by taking any one of the two-semester sequences of literature courses offered at the 200 level carrying the "English" designation.
   c. Art, Music, Philosophy, religion (6)
      Music 113, 114, 115, 116, 171, 172, 215, 216, 218, 351, University Chorus, Concert Band, Private Music Instruction and art studio courses may not be used to meet this requirement.
   d. Foreign language requirement (0-12)
      Depending upon placement, each student must present twelve semester-hours in a foreign language.

II. Social and Behavioral Sciences .................................. 12
    Disciplines included are grouped as follows:
    Group A: anthropology, psychology, sociology
    Group B: economics, government, history
    Six semester-hours are required from each group.

III. Mathematics and Natural Sciences .................................. 11
     Mathematics, geology, physics, astronomy, biology, chemistry. Eight of the required semester-hours must be in a two-semester sequence requiring laboratory work. The remaining three semester-hours may be met by the completion of a course in another science or in mathematics.

IV. Non-Western Culture .................................. 6
    Six credits must be earned in courses devoted to non-Western culture.
    For the present, the following courses are designated as meeting this requirement:
    a. Anthropology 102: Social Anthropology
    b. Art 221: History of Ancient Art
    c. English 394: Japanese Literature in Translation
       English 395: Chinese Literature in Translation
    d. History 241, 242: A Survey of East Asian Civilization
       History 261, 262: Survey of African Civilization
       History 281, 282: Survey of Middle Eastern Civilization
       History 328: Rise of Russia
       History 329: Modern Russia and The Soviet Union
       History 361: Latin-American History: The Colonial Era
GEORGE MASON UNIVERSITY

   Music 231: Survey of World Music Literature
   Music 335: Historical, Theoretical, and Analytical Study of
   Music I
f. Religion 211: Religions of the Near East
   Religion 212: Religions of the Orient
   Religion 334: Religion in the Theatre of Asia
The courses meeting this requirement may also be presented
in partial fulfillment of requirements stated in Sections I and II.

V. Major ................................................................. 30-42
See appropriate departmental sections of the catalog for required
credits. At least twelve hours of work in the major field at the 300
and 400 level must be completed at George Mason University.

VI. Total minimum semester-hours ..........................120

The new graduation requirements for the B.A. degree became
effective for all freshmen who entered in the fall of 1968 or who enter
thereafter and for all transferring students graduating in June 1972 or
later. Students enrolled prior to September 1968 and transfer students
who will graduate before June 1972 may elect to fulfill either the new
or old (1967-1968 catalog) requirements.

BACHELOR OF SCIENCE

I. Fulfillment of the requirements for the major as listed under the
   respective departments: Behavioral Sciences, Biology, Chemistry,
   Mathematics, Physics, and Social Sciences. For information
   concerning the interdisciplinary program in Law Enforcement see
   page 124.

II. At least twelve semester-hours of course work outside the area of
    specialization as follows:

    (a) If the degree is in the behavioral sciences, twelve hours outside
        those fields.
    (b) If the degree is in the natural sciences or mathematics, twelve
        hours outside those fields.
    (c) If the degree is in the social sciences, twelve hours outside
        those fields.

III. At least twelve semester-hours of English.

IV. Total minimum semester-hours, 120.
DEGREE REQUIREMENTS

ENGINEERING

(Two Years Only)

George Mason University offers a two-year pre-engineering program designed to meet most of the basic requirements of the first two years of the standard engineering curriculum. A student completing this course of study may expect to complete the Bachelor of Science degree in any of the specialized areas offered at the University of Virginia or other schools of engineering. Although the engineering programs at the University of Virginia are formally designed for completion in four years, it is not unusual for a resident student there to spend five years completing the degree. See page 112 for course descriptions.

First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester-Hours</th>
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</thead>
<tbody>
<tr>
<td>English 101-102</td>
<td>Composition</td>
<td>6</td>
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<tr>
<td>Chemistry 111-112</td>
<td>General Chemistry</td>
<td>8</td>
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<tr>
<td>Mathematics 113, 114: Analytical Geometry and Calculus I, II</td>
<td>8</td>
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<tr>
<td>Engineering 101: Introduction to Engineering</td>
<td>1</td>
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<tr>
<td>Engineering 102: Engineering Computations</td>
<td>1</td>
<td></td>
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<tr>
<td>Engineering 191: Engineering Graphics</td>
<td>3</td>
<td></td>
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<tr>
<td>Engineering 192: Introduction to Mechanics</td>
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<tr>
<td>Physics 113, 114: General Physics I, II</td>
<td>4</td>
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<td>34</td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester-Hours</th>
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</thead>
<tbody>
<tr>
<td>Mathematics 213, 214: Analytical Geometry and Calculus III, IV</td>
<td>6</td>
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<tr>
<td>Physics 213, 214: General Physics III, IV</td>
<td>6</td>
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<tr>
<td>Physics 215, 216: General Physics III, IV Laboratories</td>
<td>4</td>
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<tr>
<td>Engineering 206: Dynamics</td>
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<tr>
<td>Or Engineering 208: Properties of Materials</td>
<td>3</td>
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<tr>
<td>Engineering 207: Thermodynamics</td>
<td>3</td>
<td></td>
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<tr>
<td>Engineering 285: Electric Circuits</td>
<td>3</td>
<td></td>
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<tr>
<td>Engineering 302: Electronics</td>
<td>4</td>
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<td></td>
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<td>29</td>
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</tbody>
</table>
College of Professional Studies

GENERAL. The College of Professional Studies at George Mason University enrolls students preparing for certain professions. Currently, all business administration, elementary education, and health and physical education majors enroll in the College of Professional Studies. Additionally, the Department of Education is responsible for the professional sequence of courses and special standards, as well as the certification recommendation, for Arts and Sciences majors desiring to complete requirements for the Virginia Collegiate Professional Teaching Certificate.

The overall George Mason University requirements specified in the opening part of the catalog section on “Academic Programs and Degree Requirements” (pp. 41 and 42) apply to students in the College of Professional Studies. Under “Academic Achievement,” however, education students (both elementary and secondary) should be aware of the 2.300 cumulative average requirement for admission to teacher education and to student teaching. Students seeking to transfer into Education from other departments, schools, colleges and universities with cumulative averages lower than 2.300 are discouraged from doing so because they cannot complete the professional sequence of courses required for graduation without sufficient improvement to meet the standard. For further information on special requirements in preparing to teach, see Courses of Instruction: Department of Education.

Because of the diversity of professional programs, general education needs among the students vary; therefore, there follows an outline on requirements for each program.

BACHELOR OF SCIENCE
IN BUSINESS ADMINISTRATION

I. Language Arts and Culture ........................................ 21
   a. English 1. English Composition (6)
   b. Speech (3) – Select one
      1. Principles of Effective Speech
      2. Public Speaking
      3. Group Conference
   c. Literature (6) – Select one
      1. Readings in English and Amer. Lit., or
      2. Western Literary Masterworks
   d. Humanities (6)
      (Art, Music, Philosophy, or Religion)

1. Group Conference course is recommended.
DEGREE REQUIREMENTS

II. Social Studies ............................................ 15
   a. Economics\(^2\) (including 202 or 301) (6)
   b. History or Government (3)
   c. Psychology or Sociology (6)

III. General and Health Sciences .......................... 14
    a. Mathematics (6)
    b. Laboratory Sciences (8)

IV. Open Electives ........................................... 21

V. Major (See Courses of Instruction:
   Dept. of Bus. Adm.) ................................... 51

TOTAL MINIMUM SEMESTER HOURS 122

BACHELOR OF SCIENCE
IN EDUCATION

Major in
Elementary Education

Req. Semester Hrs.

I. Language Arts and Culture ............................... 29 or 30
   a. English
      1. English Composition ............................. 6
   b. Speech — Select one .............................. 3
      1. Principles of Effective Speaking
      2. Public Speaking
      3. Interpretative Reading
   Option of c or d ........................................ 8 or 9
   c. Foreign Language (8*) — Select one
      1. French
      2. Spanish
      3. German
   d. Regional Cultures (9)
      1. Latin America,
      2. Africa and Middle East, and
      3. Asia and W. Pacific
   e. Literature ........................................... 6
      1. Readings in Eng. and Amer. Lit.
   f. Humanities .......................................... 6
      1. Art for the Elementary School
      2. Music for the Elementary School

*Replace course(s) exempt with course(s) from d.
2. In addition to the six hours of Principles of Economics in the Business core.
GEORGE MASON UNIVERSITY

II. Social Studies ...................................................... 18+
   a. History
      1. American History 121, 122 ...................... 6
      2. World History 101 .............................. 3
   b. Other subjects
      1. Economics ........................................... 3
      2. Geography .......................................... 3
      3. Government
      4. Sociology
      5. Anthropology

III. General and Health Sciences ................................. 21
   a. Personal and Community Health —
      Health 210 ............................................. 3
   b. P.E. Activities — P.E. 101 to 140 ............... 4
   c. Mathematics ........................................... 6++
   d. Laboratory Science ................................. 8

IV. Elective Concentration¹  .................................... 21

V. Open Electives ................................................. 3 or 5

VI. Major (See courses, Dept. of Educ.) ....................... 36

TOTAL MINIMUM SEMESTER-HOURS ......................... 128

Notes

1. Elective Concentration: It is urged that every Elementary Education major choose a subject field concentration pertinent to the elementary school curriculum so that he may possess a strength among the school subjects. He then can make a major contribution to team teaching or to certain subjects scheduled separately for greater emphasis. This 21 hours must be in addition to any "concentration" subjects taken in the general education area above. Suggested subject areas are: a foreign language, social studies, mathematics, sciences, English composition and literature, music, and library science. Behavioral sciences is also acceptable as a concentration area.

+Only 15 required in Social Studies for those taking the Regional Cultures sequence.
++G.H.S. 371, 372.
# Bachelor of Science in Education

## Major in Health & P.E.

<table>
<thead>
<tr>
<th>Area</th>
<th>Required Semester Hrs.</th>
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<tbody>
<tr>
<td><strong>I. Language Arts and Culture</strong></td>
<td></td>
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<tr>
<td>a. English</td>
<td></td>
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<tr>
<td>1. English Composition</td>
<td>6</td>
</tr>
<tr>
<td>b. Speech – Select one</td>
<td>3</td>
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<tr>
<td>1. Principles of Effective Speaking</td>
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<td>2. Public Speaking</td>
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<td>3. Interpretative Reading</td>
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<tr>
<td><strong>Option of c or d</strong></td>
<td>8 or 9</td>
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<tr>
<td>c. Foreign Language (8*) – Select one</td>
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<tr>
<td>1. French</td>
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<td>2. Spanish</td>
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<tr>
<td>3. German</td>
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<tr>
<td>d. Regional Cultures (9)</td>
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<tr>
<td>1. Latin America,</td>
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<tr>
<td>2. Africa and Middle East, and</td>
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<tr>
<td>3. Asia and W. Pacific</td>
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<tr>
<td>e. Literature</td>
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<tr>
<td>1. Readings in Eng. and Amer. Lit.</td>
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<tr>
<td>f. Humanities</td>
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<tr>
<td>1. Art for the Elementary School</td>
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<tr>
<td>2. Music for the Elementary School</td>
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<td>3. Art Appreciation</td>
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<tr>
<td>4. Music Appreciation</td>
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<tr>
<td><strong>II. Social Studies</strong></td>
<td>18</td>
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<tr>
<td>a. History</td>
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<tr>
<td>1. American: History 121, 122</td>
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<tr>
<td>b. Other subjects</td>
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<tr>
<td>1. Economics</td>
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<td>2. Geography</td>
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<tr>
<td>3. Government</td>
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<td>4. Sociology</td>
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<td>5. Anthropology</td>
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<tr>
<td><strong>III. General and Health Sciences</strong></td>
<td>21</td>
</tr>
<tr>
<td>a. Personal and Community Health –</td>
<td></td>
</tr>
<tr>
<td>Health 210</td>
<td>3</td>
</tr>
<tr>
<td>b. P.E. Activities – P.E. 101 to 140</td>
<td>4</td>
</tr>
</tbody>
</table>

*Replace course(s) exempt with course(s) from d.*

**Only 6 required here for those taking the Regional Cultures sequence. World History may be one of the courses.*
GEORGE MASON UNIVERSITY

c. Mathematics ................................6

d. Laboratory Science ..........................8

IV. Major Concentration¹ ..............................29***

V. Open Electives .....................................4 or 9

VI. Professional Sequence¹ ............................27

TOTAL MINIMUM SEMESTER-HOURS .............128

Notes

1. Health and Physical Education major field requirements as well as Professional Sequence requirements are listed under Department of Education in the “Courses of Instruction” section of the Catalog.

***Counting Pers. & Comm. Health (3) and P.E. Activities (4), total is 36.
Courses of Instruction

Introduction

College of Arts and Sciences
Department of Behavioral Sciences
Department of Biology
Department of Chemistry
Department of English
Department of Foreign Languages
Department of History
Department of Humanities
Department of Mathematics
Department of Physics
Department of Social Sciences

Interdisciplinary Programs
Latin American Studies
Law Enforcement

College of Professional Studies
Department of Business Administration
Department of Education
Department of General Studies
INTRODUCTION

The number and variety of courses will be increased as needed. No course listed in the schedule of classes will be offered for which there is insufficient enrollment. A schedule of classes will be available before registration at the start of each semester. The University reserves the right to change the schedule and to adjust individual section enrollments as necessary.

Course numbers in the 100 series are customarily taken by freshmen, the 200 series by sophomores, the 300 series by juniors, and the 400 series by seniors.

The number designations of the course descriptions below have the following significance:

A single number (as History 301) indicates that the course is complete within a single semester, and that the semester course may be taken separately with credit toward a degree.

A double number separated by a hyphen (as Biology 103-104) indicates that the course extends through two semesters, that both semesters must be completed before the course may count toward a degree, and that the first semester is prerequisite to the second semester. A student may not take the second semester of a hyphenated course unless he has received either transfer credit for the equivalent of the first semester or advanced placement from the department concerned.

A double number separated by a comma (English 351, 352) indicates that the course extends through two semesters and that either semester may be taken by itself. Unless otherwise specified, the first semester is not prerequisite to the second semester.

In general, an odd number (as Biology 103) indicates that the course is given in the first semester of the session; an even number (Biology 104) indicates that the course is given in the second semester.

The credit in semester-hours is shown in brackets in each course description [3].
College of Arts and Sciences
Department of Behavioral Sciences

Professor Jordan (Chairman)
Associate Professors Hughes, Lodge, Mandes, Tavani
Assistant Professors Buffardi, Cannavale, Cohen, MacConkey, McKeithen, Peng, White
Acting Assistant Professors Madero, Ritter
Instructor Ryburn
Lecturers Hartley, Mellinger, Picciano

PSYCHOLOGY

REQUIREMENTS FOR THE MAJOR

The major program in psychology culminates in a Bachelor of Arts degree. In addition to the general requirements for that degree set forth in the academic regulations of the University, thirty-five semester-hours in psychology including Psychology 221, 322, 401, and 413 must be presented. Students are strongly advised to elect relevant courses in biology, philosophy, sociology, and anthropology in addition to these requirements for the major.

Not more than forty-two hours in psychology may be submitted in fulfillment of the degree program, but hours of credit in excess of that number may be counted toward graduation as elective hours.

COURSES

101-102: GENERAL PSYCHOLOGY. [3-3]
Prerequisite to all other courses in Psychology. Psychology 101 or permission of instructor is required for Psychology 102. An examination of the principles of behavior and of certain of the experimental data supporting them. Maturation of behavior; learning; motivation; emotion, sensory and perceptual processes; thinking; personality; measurement of ability; organic bases of behavior; small group behavior, and other social factors affecting behavior.

201: SOCIAL PSYCHOLOGY. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A study of man's development in a social matrix, stressing particularly interpersonal behavior. The topics presented include socialization, cultural behavior, group norms, group roles, types of leadership, intragroup status, and attitude formation.
202: PERSONALITY THEORY. [3]
Prerequisite: Psychology 101-102 or permission of instructor. An introduction to classical and contemporary theories of personality and a comparative evaluation of major theories in terms of relevant research studies. Journals and other literature are used to introduce research methods and problems.

203: PSYCHOLOGY OF CHILDHOOD. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A study of the process of human development from conception to adolescence. Genetic factors and environmental influences as they interrelate to shape physical, intellectual, emotional and social growth are considered. Pertinent psychological theories and the research findings upon which they are based are presented.

204: PSYCHOLOGY OF ADOLESCENCE. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A study of the biological and cultural changes accompanying adolescence and the effect of these changes on emotional, intellectual, and physical growth; social development and heterosexuality; adolescent personality; problems of adjustment; civic competence and juvenile delinquency; emancipation from parents, and vocational choice.

211: HISTORY OF PSYCHOLOGY. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A survey of man’s attempts to understand himself systematically from the classical age until the beginning of the present century. Special emphasis will be placed on the models of man, be they explicit or implicit, underlying this thinking and the extent by which they changed or did not change with time, their empirical justification, and the extent by which they can be called “scientific”.

221: STATISTICS FOR THE BEHAVIORAL SCIENCES. [4]
Prerequisite: Psychology 101-102 or permission of instructor. An introduction to the fundamentals of applied statistics as used in the behavioral sciences to include descriptive statistics, inferential statistics, correlation-regression, analysis of variance, factor analysis, non-parametric statistics, and practical experience with calculators in applying statistical analysis to actual problems of the behavioral sciences. Three class hours and two laboratory hours. (This course is the same as Sociology 221; both may not be taken for credit.)

301: ABNORMAL PSYCHOLOGY. [3]
Prerequisite: Psychology 202 or permission of instructor. A study of factors underlying human behavior and the relationships between these factors and abnormal behavior. Special emphasis is placed upon the dynamics of maladjustment which result in neuroses and psychoses.

302: ABNORMAL PSYCHOLOGY. [3]


Prerequisite: Psychology 301 or permission of instructor. A study of the development of abnormal behavior patterns. Also considered are present-day methods of diagnosis, treatment and prevention of serious mental disorders such as psychosomatic disorders, the psychoses, character disorders and mental retardation.

303: COGNITIVE DEVELOPMENT. [3]
Prerequisite: Psychology 203 or permission of instructor. The theories of cognitive development of Jean Piaget are discussed, as well as the views of Bruner, Sigel and Hunt. Experimental support of these theories will be considered. Several approaches to programs of enrichment, particularly with the culturally disadvantaged, will be examined.

306: THINKING AND PROBLEM SOLVING. [3]
Prerequisite: Psychology 211 or permission of instructor. The major psychological theories on thinking and problem solving will be studied and the experimental and empirical evidence adduced in their favor will be critically reviewed.

307: PHYSIOLOGICAL PSYCHOLOGY. [3]
Prerequisite: Psychology 101-102 or permission of instructor. Biology is desirable but not required as a prerequisite. A systematic examination of the physiological mechanisms and processes, neural and chemical, underlying behavior.

308: PSYCHOLOGY OF MOTIVATION. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A survey of contemporary approaches to motivational theory in terms of such concepts as instinct, drives, reward and punishment, curiosity and exploration, frustration and conflict, and selected acquired sources of motivation.

313: PSYCHOLOGY OF LEARNING. [3]
Prerequisite: Psychology 101-102 or permission of instructor. A survey of the basic principles of human and animal learning, with attention to factors which influence memory, discrimination, and problem solving.

315: PSYCHOLOGY OF BUSINESS AND INDUSTRY. [3]
Prerequisite: Psychology 101-102 or permission of instructor. An examination of the application of psychological principles and methods to problems commonly encountered in business and industry.

322: EXPERIMENTAL PSYCHOLOGY. [4]
Prerequisite: Psychology 321 or permission of instructor. An approach to experimental psychology. Lecture topics include classical and contemporary studies in sensation and perception, animal and human learning, concept formation, and psycholinguistics. Laboratory experiments will provide students with semi-independent research experience with these topics. Three class hours, four laboratory hours.
401: PSYCHOLOGICAL TESTS AND MEASUREMENTS. [3]
Prerequisite: Psychology 221 or permission of instructor. An examination of principles underlying the theory, interpretation, and administration of psychological tests for evaluating personality attributes as employed in schools, industry, and clinics. A survey of representative tests in the fields of intelligence, achievement, aptitude, interests and personality is undertaken.

403: SEMINAR IN INFANT DEVELOPMENT. [3]
Prerequisite: Psychology 203 or permission of instructor. Examination of current issues, research methods and clinical evaluation techniques in the field of infant development. Genetic, constitutional and environmental influences will be considered with special attention to prenatal and perinatal factors, role of stimulation, and the interaction of biochemical, physiological, behavioral and experiential variables. Areas of development covered to include sensorimotor, perceptual-cognitive, language, motivation and personality.

404: THE EXCEPTIONAL CHILD. [3]
Prerequisite: Psychology 203 or permission of instructor. Consideration of problems associated with developmental deviation in infancy through adolescence. Special emphasis will be given to behavioral characteristics and educational needs found in mental retardation, minimal brain dysfunction, special learning disabilities and other handicapping conditions. The special needs and problems of the gifted child, the disturbed child and the delinquent child will also be examined.

410: COMPARATIVE PSYCHOLOGY. [4]
Prerequisites: Psychology 307, 322 or permission of instructor. Principles and methods in the study of animal psychology. Topics will include genetics, evolution, early experience, species-specific behavior, consummatory behavior, and learning. Laboratory experiments will provide students with semi-independent research experience with these topics. Three class hours, three laboratory hours.

413: THEORIES AND SYSTEMS OF PSYCHOLOGY. [3]
Prerequisite: Twelve hours in upper division psychology courses or permission of the instructor. The various systems and theories that have played a role in twentieth century psychology will be studied: association theory, structuralism, the many forms of behaviorism, the organismic psychologies, theories of personality and abnormal behavior, and the contemporary anti-theoretical theories.

415: HUMAN FACTORS ENGINEERING. [3]
Prerequisite: Psychology 315 or permission of instructor. This course will investigate the complex man-to-man and man-to-machine interactions found in industry today. It will involve an understanding of those techniques utilized for the proper assignment of functions between man and machine. Extensive empirical research findings and their theoretical basis will be examined.
COURSES OF INSTRUCTION

416: THE CLINICAL METHOD IN PSYCHOLOGY. [3]
Prerequisite: Psychology 302 or permission of instructor. The historical and empirical foundations of clinical psychology will be studied with emphasis being placed on how clinical practice was shaped by theories, research, and social organization. In conclusion the major forms of current clinical practice will be reviewed.

431: PERCEPTION. [3]
Prerequisite: Psychology 322 or permission of instructor. An investigation of the experimental psychology of perception with an emphasis on current theories and research.

480: SEMINAR IN PSYCHOLOGY. [2]
Prerequisite: Enrollment is restricted to senior majors in psychology. This course may be taken for credit only once by a student. Topics of contemporary interest in psychology will be offered through individual class reports and group discussion. The topic to be studied will vary from semester to semester. Topic for Spring 1973: The Analytical Psychology of C. G. Jung. Of interest to students of literature, philosophy, religion, and sociology. Senior or higher standing required, but no specific prerequisites in the Spring 1973 semester only.

499: INDEPENDENT STUDY IN PSYCHOLOGY. [3]
Prerequisite: Psychology 322, a "B" average in psychology, and a research proposal approved in advance of enrollment by the instructor and the chairman of the department. Open to senior majors only. Investigation of a psychological problem according to individual interest with stress on research methods.

SOCIOLoGY

REQUIREMENTS FOR THE MAJOR. Students majoring in sociology must satisfy the area requirements set for the Bachelor of Arts degree at George Mason University. In addition, they must present thirty-three hours of work in sociology, to include Sociology 221, 303 and 411. Students are advised to elect relevant courses in anthropology, biology, philosophy and psychology in addition to these requirements for the major. Three hundred level courses require at least six semester-hours in sociology (includes Sociology 101); four hundred level courses require at least twelve semester-hours in sociology (includes Sociology 101).

Not more than forty-two credit hours in sociology may be submitted for the degree requirements. Additional credit hours in sociology may be counted as elective hours on the degree application form.

B.S. IN SOCIAL WELFARE

To receive a B.S. degree with a major in social welfare, a minimum of forty-five semester-hours in the Behavioral Sciences is required,
including the following courses: Psychology 101, 102, 201, 203 and 204; and Sociology 101, 152, 251, 352, 451, and 452. In addition, students must present six semester-hours in English composition; six semester-hours in English literature; six semester-hours in philosophy, music, religion, or art; six semester-hours in economics, government, or history; eight semester-hours in biology; three semester-hours in mathematics. Three semester-hours in speech are recommended.

COURSES

101: INTRODUCTORY SOCIOLOGY. [3]
An introduction to basic sociological concepts. Aspects of human behavior; individual and group interaction; social mobility and stratification; status and class; race relations; urbanism; crime and criminology; social change and reform.

152: MODERN SOCIAL PROBLEMS. [3]
Prerequisite: Sociology 101 or permission of instructor. A sociological analysis of the problems of modern society, including those related to stratification, urbanism, family and kinship, cultural change, and deviant behavior.

201: MARRIAGE AND THE FAMILY. [3]
Prerequisite: Sociology 101 or permission of instructor. A study of marriage and the family in contemporary America. Premarital behavior and courtship; marital adjustment; socialization of children. Lectures and discussions.

202: CRIMINOLOGY. [3]
Prerequisite: Sociology 101 or permission of instructor. An analysis of the nature, genesis, organization, and personal and social consequences of crime and criminal behavior; an examination of theories of punishment and treatment of criminals and prevention of crime; police and court systems, prisons, and reformatories.

203: THE SOCIOLOGY OF SMALL GROUPS. [3]
Prerequisite: Sociology 101 or permission of instructor. The study of the characteristics, structure, and processes of small group dynamics; theories and models of group analysis; techniques of observation and research on variables in small groups that produce problems in our national life.

221: STATISTICS FOR THE BEHAVIORAL SCIENCES. [4]
Prerequisite: Sociology 101 or permission of instructor. An introduction to the fundamentals of applied statistics as used in the behavioral sciences to include descriptive statistics, inferential statistics, correlation-regression, analysis of variance, factor analysis, non-parametric statistics, and practical experience with calculators in applying statistical analysis to actual problems of the behavioral sciences. Three class hours and two laboratory hours. (This course is the same as Psychology 221; both may not be taken for credit.)
COURSES OF INSTRUCTION

225: SOCIOLOGY OF WAR AND PEACE. [3]
Prerequisite: Sociology 101 or permission of instructor. Evolution of war and peace as social conflict and conflict resolution in human societies. Theories of causality of war and peace, changing nature of war and peace, and consequences of war and peace at different periods in the sociocultural evolution of human societies.

232: SOCIOLOGY OF URBAN COMMUNITIES. [3]
Prerequisite: Sociology 101 or permission of instructor. An analysis of the urban community: historical development, demography, and ecology of metropolitan areas; urbanism as a way of life; the emergence of suburbia as a sociological phenomenon.

251: INTRODUCTION TO SOCIAL WELFARE. [3]
Prerequisite: Sociology 152 or permission of instructor. An introduction to the field of social welfare, its historical development, central concepts and institutional nature. Examines the formal and informal processes through which social services are organized and extended to individuals, groups, neighborhoods, and larger communities. Offers analysis and field observation of some of the institutions, agencies and programs developed to meet today’s complex social needs.

302: SOCIOLOGY OF DELINQUENCY. [3]
Prerequisite: Sociology 202 or permission of instructor. An inquiry into the types, causes, treatment and prevention of delinquent behavior.

303: SOCIOLOGICAL RESEARCH METHODOLOGY. [4]
Prerequisite: Sociology 221 or permission of instructor. An introduction to empirical design in sociological research. Historical development, research design, sampling, methods of gathering data, sociometric scales, analysis and interpretation of results, and research reporting are examined. Three class hours and two laboratory hours.

305: SOCIOLOGY OF DEVIANCE. [3]
Prerequisite: Six hours of sociology to include Sociology 101 or permission of instructor. The major theoretical approaches to deviant behavior will be explored: functional theory, conflict theory, and symbolic interaction theory. Both the positive and negative aspects of deviant behavior will be examined in relation to their effects upon society.

307: SOCIOLOGY OF COLLECTIVE BEHAVIOR. [3]
Prerequisite: Six hours in sociology to include Sociology 152 or permission of instructor. An analysis of crowds, mobs, and publics. The structure and function of social movements distinguished from other forms of collective behavior are examined. Includes examination of leadership in various types of collective behavior.

308: SOCIOLOGY OF RACE RELATIONS AND MINORITIES. [3]
Prerequisite: Six hours in sociology to include Sociology 152 or
permission of instructor. An examination of ethnic and nationality minority groups in modern society with particular emphasis on the Negro in the United States.

Prerequisite: Sociology 251 or permission of instructor. Introduces student to the profession of social work, its historical and philosophical bases, values, norms, functions, and methods. Explores the social work profession's links to other disciplines and to social action and policy formulation. Studies the basic processes and adaptive roles of the social worker at the various levels of individual client, group and community. Social problems and fields of service are used as major foci of learning, both classroom- and field-based.

382: EDUCATION IN CONTEMPORARY SOCIETY. [3]
Prerequisite: Six hours in sociology to include Sociology 101 or permission of instructor. The study of education as a social institution. Its function as a socializing agency for social stability and social change, the influences of social class elements on the educational process, and the social organization of the U. S. public school system are emphasized.

390: MEDICAL SOCIOLOGY. [3]
Prerequisite: Six hours of sociology to include Sociology 101 or permission of instructor. An examination of the social context of disease and medical care, the positions of the professions in the medical care structure, the delivery of medical care and the physician-patient relationship under different systems of practice. The etiology, incidence and prognosis of disease, and the restoration of patients to their normal social functions are studied in relation to the social environment.

392: FORMAL ORGANIZATION. [3]
Prerequisite: Six hours of sociology to include Sociology 101 or permission of instructor. An analysis of types of large, complex organizations in society; a study of the bureaucracy and of the informal group formation which is often a part of the larger structure. Effectiveness of the formal organization and its administration are features of the course.

401: SOCIAL STRATIFICATION. [3]
Prerequisite: Twelve hours in sociology to include Sociology 101 or permission of instructor. An examination of theories of and research in social stratification. Attention is given to western and nonwestern systems of social differentiation, with emphasis on selected bases of occupational and other social structures, of social mobility, and status relations in society.

402: SOCIOLOGY OF PUNISHMENT AND CORRECTIONS. [3]
Prerequisite: Twelve hours in sociology to include Sociology 302 or
permission of instructor. Historical overview and theory of justice; analysis of the treatment of the adult and juvenile offender. Includes discussion of the origin and development of punishment, correction, rehabilitation, residential treatment, and the halfway house. The roles of legal and social agencies in the treatment process are compared and contrasted.

410: SOCIAL SURVEYS AND ATTITUDE AND OPINION MEASUREMENT. [3]
Prerequisite: Twelve hours in sociology to include Sociology 303 or permission of instructor. Survey research methods and techniques used in collecting and analyzing social data and the techniques and methods for measuring social attitudes and opinions will be studied.

411: SOCIOLOGICAL THEORY. [3]
Prerequisite: Twelve hours in sociology to include Sociology 101 or permission of instructor. The sociological tradition will be explored through readings and discussions of ideas drawn from the writings of selected sociological thinkers; such as, Comte, Marx, Weber, Durkheim and others.

413: SEMINAR IN SOCIAL ISSUES. [3]
Prerequisites: Senior standing, Sociology 411, and any other additional nine hours of sociology credit. The Seminar in Social Issues provides an opportunity for advanced students of sociology to apply the theoretical perspectives and methodological skills, learned in prerequisite offerings, to contemporary relevant issues.

451: PRACTICUM. [6]
Prerequisites: Sociology 352 and concomitant enrollment in Sociology 452. Open only to seniors who are majors in Social Welfare. An intensive field experience course designed to offer an educationally relevant social work experience for advanced majors in Social Welfare. Under field agency supervision, students will be involved in learning opportunities through participation in the provision of service to individual clients, groups and/or communities and in related professional activities. Seminar discussion and periodic faculty-agency consultations will be employed to give further focus to learning.

452: METHODS OF SOCIAL WORK INTERVENTION. [3]
Prerequisite: Concomitant enrollment in Sociology 451. This course offers exploration of social work practice theory and opportunity to assess and modify practice skills employed in concurrent field work. Primary emphasis is on the development of knowledge and skills basic to effective social work practice: data-gathering, listening, observing, communicating, interviewing, assessing, planning, and working with groups. Draws upon readings, role-plays and "live" material from students' concurrent field experiences with individuals, groups and communities.

480: SEMINAR IN SOCIOLOGY. [2]
GEORGE MASON UNIVERSITY

Prerequisite: Enrollment is restricted to senior majors in sociology. This course may be taken for credit only once by a student. Topics of contemporary interest in sociology will be offered through individual class reports and group discussion. The topic to be studied will vary from semester to semester.

499: INDEPENDENT STUDY IN SOCIOLOGY. [3]
Prerequisites: Eighteen hours of sociology which includes Sociology 303 and 411, a B average in sociology, senior standing, and a research proposal approved in advance of enrollment by the instructor and chairman of the department. Investigation of a sociological problem according to individual interest with stress on research.

ANTHROPOLOGY COURSES

101: HUMAN EVOLUTION AND PREHISTORY. [3]
The origin and evolution of man based upon the fossil record; the status of modern racial groupings; the history of human society from the earliest times to the rise of the civilizations in the Old and New Worlds.

102: SOCIAL ANTHROPOLOGY. [3]
The comparative study of culture (including language) and the social institutions of mankind with particular reference to primitive and peasant societies. Certain aspects of Western culture will be considered from this perspective.
Department of Biology

Professor Emsley (Chairman)
Associate Professors Stanley, Wall
Assistant Professors Andrykovitch, Bradley, Flint, Holdsworth, Joslin, Kelso, Mason, Shaffer
Acting Assistant Professor Mueller
Instructors Hays, Parks, Withers

REQUIREMENTS FOR THE MAJOR

B.A. Degree.—In addition to the general requirements, a minimum of thirty-two semester-hours in biology is required for the B.A. degree with a major in biology. The courses selected must include the core consisting of 113-114: Biological Science; 283: Cell Biology; 311: General Genetics; and 445: Ecology; and will normally be taken in the first, second, third and fourth years of study respectively. Biology credit may be gained in Introductory Biochemistry. General Chemistry is required and Organic Chemistry, Physical Chemistry and Introductory College Physics and Calculus are recommended.

B.S. Degree.—In addition to the general requirements, a B.S. degree with a major in biology requires a minimum of forty-four semester-hours in biology. The same core courses, taken in their respective years, are required as for the B.A. degree, but Organic Chemistry is required in addition to General Chemistry. Biology credit may be gained in Introductory Biochemistry. Physical Chemistry, Introductory College Physics, and Calculus are recommended.

COURSES

103-104: MAN AND HIS ENVIRONMENT. [4-4]
Biology for non-science majors. The course is strongly biased towards the consideration of biological problems facing modern man. Topics discussed will include theories of the origin of earth and life, energy and the environment, plant and animal communities, principles of human anatomy and physiology, the mechanisms of inheritance and evolution, and the evolution of man. Three lecture hours, three laboratory hours. Neither semester may be combined with 101-102, or 113-114 for fulfillment of the science requirement. Only twelve semester-hours of credit may be earned in 100 level Biology courses. Students who have taken Biology 101-102: General Biology, are not eligible to take this course.

113-114: BIOLOGICAL SCIENCE. [4-4] or [2-2 if credit has been previously earned in 103-104]
An introductory course for prospective science majors and pre-professionals in the life sciences. The study of living organisms, their origin and types; the principles of metabolism, growth, reproduction, heredity, adaptation, and evolution. Three lecture hours, three laboratory hours.
Only twelve semester-hours of credit may be earned in 100 level Biology courses. Students who have taken Biology 101-102: General Biology, are not eligible to take this course.

221: VERTEBRATE ZOOLOGY. [5]
Prerequisite: 8 semester-hours of credit in 100 level Biology, or permission of instructor. A study of the evolution, natural history, and structural and functional adaptations of the major groups of vertebrates. The laboratory emphasizes the comparative anatomy of the shark and cat and provides an introduction to vertebrate histology. Three lecture hours, six laboratory hours.

228: ORNITHOLOGY. [4]
Prerequisite: 8 semester-hours of credit in 100 level biology or permission of instructor. A study of birds including their evolution, taxonomy, anatomy, physiology, ecology and behavior. Field trips will emphasize recognition of bird species by their visual characteristics, songs and calls, and habitat. Two lecture hours, six laboratory hours.

244: TAXONOMY OF FLOWERING PLANTS. [4] (Alternates annually with 342)
Prerequisite: 8 semester-hours of credit in 100 level Biology or permission of instructor. A study of the principles of classification and identification of flowering plants (Anthophyta) with emphasis on the local flora. Three lecture hours, three laboratory hours.

245: PLANT COMMUNITIES. [4]
Prerequisite: 8 semester-hours of credit in 100 level Biology or permission of instructor. Plant associations and formations and their successions in North America. Three lecture hours, three laboratory hours.

Prerequisites: 8 semester hours of credit in 100 level biology or permission of instructor. A survey of the fauna of North and South America, with a comparison with that of other regions, and with an examination of the causes of the differences and similarities. Emphasis will be placed upon vertebrates. Three lecture hours.

281: MICROBIOLOGY. [4]
Prerequisites: Biology 113-114, and 283, or permission of instructor. Fundamentals of the morphology, physiology, and biochemical characteristics of bacteria, rickettsia, and viruses. Three lecture hours, three laboratory hours.

283: CELL BIOLOGY. [4]
Prerequisites: Biology 113-114, Chemistry 101, or permission of instructor. The study of cellular structure and function including cellular fine structure, metabolism, growth, active transport, and cellular regulation. Three lecture hours, three laboratory hours.
COURSES OF INSTRUCTION

Prerequisite: Biology 113-114 or permission of instructor. An introduction to the bacteria, yeasts, molds, viruses, rickettsias and endoparasites with emphasis on organisms important in human health and disease. A discussion of immunity and serologic procedures. The laboratory includes sterile technique and culture methods. Intended for students in nursing and other paramedical programs. Three lecture hours, three laboratory hours. Not available for credit towards the major in Biology.

311: GENERAL GENETICS. [4]
Prerequisites: Biology 113-114, 283, or permission of instructor. A study of the basic principles of heredity and the modern developments in the field. Three lecture hours, three laboratory hours.

312: BIOSTATISTICS. [3]
Prerequisite: Biology 113-114, or permission of instructor. Applied statistical analysis of biological data, including common experimental designs, descriptive statistics, parametric and related nonparametric inferential statistics, and correlation-regression techniques. Three lecture hours.

322: PATTERNS OF ANIMAL DEVELOPMENT. [4]
Prerequisites: Biology 113-114, and 283, or permission of instructor. The early development and organogenesis of animals with a discussion of the phenomena of fertilization, induction, growth, metamorphosis, regeneration, and differentiation. The laboratory presents the developmental patterns of major groups of animals with emphasis on the echinoderm, insect, frog, chicken, and pig. An introduction to some techniques of experimental embryology is included. Two lecture hours, six laboratory hours. Students who have taken Biology 222: Vertebrate Embryology, are not eligible to take this course.

324: INTRODUCTORY ANIMAL BEHAVIOR. [4]
Prerequisite: Biology 113-114 or permission of instructor. A study of the behavior of animals under natural, semi-natural, and laboratory conditions. Emphasizes function, development, and evolution of behavior. Field investigations and laboratory projects will be conducted. Three lecture hours, three laboratory hours.

331: INVERTEBRATE ZOOLOGY. [4]
Prerequisite: 8 semester-hours of credit in 100 level biology, or permission of instructor. Survey of the invertebrate phyla, excluding insects, to show the morphology, phylogeny, and general biology of these groups. Three lecture hours, three laboratory hours.

332: INSECT BIOLOGY. [4]
Prerequisite: 8 semester-hours of credit in 100 level Biology or permission of instructor. A survey of the insects including taxonomy, morphology, physiology, behavior, ecology, and economic importance. The laboratory
GEORGE MASON UNIVERSITY

emphasizes experimental methods. *Three lecture hours, three laboratory hours.*

342: PLANT MORPHOLOGY. [4] (Alternates annually with 244)  
Prerequisite: Biology 101-102 or 113-114 or permission of instructor.  
Origin and development of organs and tissue systems of plants, with  
phylogenetic comparisons beginning with mosses and liverworts and  
continuing with vascular plants. *Three lecture hours, three laboratory hours.*

343: ALGAE AND FUNGI. [4]  
Prerequisite: Biology 113-114 or permission of instructor. An introduction  
to the biology of the algae and fungi with emphasis on their morphology  
and life-histories. Also included are physiology, taxonomy, ecology,  
evolution and importance to man. *Three lecture hours, three laboratory hours.*

362: MAMMALIAN PHYSIOLOGY. [4]  
Prerequisites: Biology 113-114, 283, Chemistry 102, or permission of  
instructor. A general survey of the anatomy and function of the  
mammalian organ systems. *Three lecture hours, three laboratory hours.*

381: IMMUNOLOGY. [4]  
Prerequisite: Biology 113-114, 283, 281, or permission of the instructor.  
Introduction to the principles and concepts of immunology. Characteristics  
of antigens, antibodies, immunological reactions, hypersensitivity, and immune response. *Three lecture hours, three laboratory hours.*

411: ADVANCED GENETICS. [4]  
Prerequisite: Biology 311 or the equivalent. Advanced classical,  
physiological and population genetics with emphasis on problems in  
current research. *Three lecture hours, three laboratory hours.*

412: MICROBIAL GENETICS. [4]  
Prerequisites: Biology 113-114, and 281, or permission of instructor. An  
introduction to genetic principles and methodology applicable to  
microorganisms. The chemical nature, fine structure, and function of the  
gene as revealed by the study of microorganisms. *Three lecture hours, three laboratory hours.*

441: PLANT ANATOMY. [4]  
Prerequisite: Biology 113-114 or permission of instructor. A detailed  
study of plant cells and tissues, their derivation and development.  
Embryological development is included. *Three lecture hours, three laboratory hours.*

Prerequisites: Biology 113-114, and 311, or permission of instructor. The
physical environment, energy flow, populations as units of structure and function, the dynamics of communities and succession. The laboratory work will include a study of some ecosystems in the Northern Virginia area. *Three lecture hours, three laboratory hours.*

446: PHYSIOLOGICAL VERTEBRATE ECOLOGY. [3]
*Prerequisite:* Biology 113-114, or permission of instructor. The influences of environmental factors on the physiological responses of organisms. Topics to be examined will include biological rhythms, changes in physiology during acclimation or adaptation to new environments, and the effects of temperature, moisture, altitude, and environmental quality upon organisms. *Three lecture hours.*

462: ADVANCED CELLULAR PHYSIOLOGY. [4]
*Prerequisites:* Biology 113-114, 283, 8 semester-hours of inorganic chemistry and 4 semester-hours of organic chemistry, or permission of instructor. A study of the fundamental physiological properties and correlated anatomy of cells. *Three lecture hours, three laboratory hours.*

464: PLANT PHYSIOLOGY. [4]
*Prerequisites:* Biology 113-114, 283, or permission of instructor. The physiology of plant cells and plant organ systems covering such topics as structure and function of cell organelles, photosynthesis, mineral and water nutrition, plant development and its regulation, and tropic responses to environmental stimuli. *Three lecture hours, three laboratory hours.*

*Prerequisite:* Biology 113-114 or permission of instructor. A study of the microscopic structure of the tissues and organs of animals with emphasis on the vertebrates. *Three lecture hours, three laboratory hours.*

471: EVOLUTION. [3]
*Prerequisites:* Biology 113-114, and Biology 311, or permission of instructor. A study of the process of evolution with emphasis on the role of genetics, the properties of populations, and upon population differentiations. *Three lecture hours.*

473: FIELD STUDIES IN BIOLOGY. [4]
*Prerequisite:* 8 hours of credit in 100 level Biology or permission of instructor. A course for the biology teacher, or the natural historian, on the identification and biology of plants and animals in the Northern Virginia area. *Two lecture hours, six laboratory hours.*

497-498: SPECIAL PROBLEMS IN BIOLOGY. [2-2]
*Prerequisite:* Enrollment is restricted to senior majors in biology with permission of the instructor. A laboratory or field investigation under the guidance of a member of the staff. *Students who have taken Biology 499: Special Problems in Biology, are not eligible to take this course.*
Department of Chemistry

Professors Walter (Chairman), Krug
Associate Professors Cozzens, Feinstein
Assistant Professors Keeler, Mushrush, Yonuschat
Instructors Eassa, Hawkins

REQUIREMENTS FOR THE MAJOR

B.A. Degree.—In addition to general degree requirements, a minimum of thirty-two semester-hours in chemistry is required for a B.A. degree with a major in chemistry. These must include Chemistry 111-112, 213-214, 215, 218, 220, 321, 331, 332, 336, and 337. The language requirement is satisfied by German or French, although German is recommended for those planning a professional career in chemistry. Additional minimum requirements include Mathematics 113, 114, 213 and Physics 101-102.

B.S. in Chemistry.—Minimum course requirements are:

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<tr>
<th>Subject</th>
<th>Semester Hours</th>
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<tr>
<td>Chemistry</td>
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<tr>
<td>English</td>
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<tr>
<td>German</td>
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<td>Physics</td>
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<td>Electives</td>
<td>28</td>
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<td>120</td>
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Required courses in chemistry must include those indicated for the B.A. degree plus Chemistry 422, 441, and 445.

COURSES

103-104: CHEMICAL SCIENCE IN A MODERN SOCIETY. [4-4]
A terminal course in chemistry for non-science majors. A survey of the principles and application of chemistry with emphasis on pertinent topics such as environmental pollution, medicine, synthetics, earth and marine science. Three lecture hours, three laboratory hours.

111-112: GENERAL CHEMISTRY. [4-4]
A survey of the basic facts and principles of chemistry including atomic and molecular structure, the gas laws, kinetics, equilibrium, electrochemistry, and nuclear chemistry. The properties and uses of the more important elements and their compounds. Students majoring in science, engineering, or mathematics should choose this course. Three lecture hours, three laboratory hours.
213-214: ORGANIC CHEMISTRY. [3-3]
Prerequisite: Chemistry 111-112; corequisite for 213: Chemistry 215.
Corequisite for 214: Chemistry 218 or 220. The theoretical, synthetic, industrial and biological aspects of the chemistry of carbon compounds. In the first semester all students take concurrently the same laboratory course, Chemistry 215. In the second semester students may choose either of two accompanying laboratory courses, Chemistry 218 or 220. Those majoring in chemistry are required to take both, and others may do so. Three lecture hours.

215: ORGANIC CHEMISTRY LABORATORY I. [1]
Corequisite: Chemistry 213. Elementary laboratory techniques and reactions arranged to accompany Chemistry 213. Three laboratory hours.

218: ORGANIC CHEMISTRY LABORATORY II. [1]
Corequisite: Chemistry 214. Continuation of Chemistry 215 with emphasis on specialized techniques and preparations. This course is arranged to accompany Chemistry 214. Three laboratory hours.

220: ORGANIC CHEMISTRY LABORATORY II. [1]
Corequisite: Chemistry 214. Continuation of Chemistry 215 with emphasis on separation and identification of organic compounds using both classical and instrumental methods. This course is arranged to accompany Chemistry 214. Three laboratory hours.

321: ELEMENTARY QUANTITATIVE ANALYSIS. [4]
Prerequisite: Chemistry 111-112. Chemical principles with particular emphasis on ionic equilibria. The laboratory work consists of gravimetric, volumetric and instrumental methods illustrating the principal types of quantitative determinations. Where possible, work is assigned according to a student’s major interest. Two lecture hours, six laboratory hours.

331: PHYSICAL CHEMISTRY I. [3]
Prerequisite: Chemistry 111-112, Mathematics 113, 114. Prerequisite or corequisite: Physics 101-102. This course and Chemistry 332 constitute a year-long survey of physical chemistry covering topics such as thermodynamics, equilibria, kinetics, solution properties, elementary quantum theory, electrochemistry, atomic and molecular structure, and nuclear chemistry. Three lecture hours.

332: PHYSICAL CHEMISTRY II. [3]
Prerequisite: Chemistry 331. Continuation of Chemistry 331. Three lecture hours.

336: PHYSICAL CHEMISTRY LABORATORY I. [1]
Prerequisite or corequisite: Chemistry 331. Quantitative experimental study of physical chemical principles. This course and Chemistry 337 constitute a yearlong introduction to laboratory practices and theories of experimental physical chemistry. Three laboratory hours.
GEORGE MASON UNIVERSITY

337: PHYSICAL CHEMISTRY LABORATORY II. [1]  
Prerequisite or corequisite: Chemistry 331. Continuation of Chemistry 336. Three laboratory hours.

422: INSTRUMENTAL ANALYSIS. [4]  
Prerequisite: Chemistry 321; prerequisite or corequisite: Chemistry 331 or permission of instructor. A study of the application of physiochemical methods to analytical chemistry, i.e., the quantitative study of chemical reactions by use of modern analytical instrumentation. It offers the student an introduction to the theory and practice of emission spectroscopy; ultraviolet, visible, and infrared absorption spectroscopy; electrical methods of analysis; gas chromatography; nonaqueous studies; and ion exchange. Two lecture hours, six laboratory hours.

432: ATOMIC AND MOLECULAR STRUCTURE. [3]  
Prerequisite: Chemistry 331, 332. An introduction to modern theories of the nature of the chemical bond and application of these theories to the dynamics of chemical systems. Studies are made of the various experimental techniques which are applied to the elucidation of molecular structure. Three lecture hours.

441: INORGANIC CHEMISTRY. [3]  
Prerequisite: Chemistry 213-214, 321. Descriptive chemistry of inorganic elements and compounds is used to demonstrate principles and periodic relationships. Emphasis is on structure and bonding as related to properties. Three lecture hours.

445: INORGANIC PREPARATIONS AND TECHNIQUES. [3]  
Prerequisite: Chemistry 321. Application of the techniques of inorganic chemistry to the preparation and purification of selected substances. One lecture hour, six laboratory hours.

451, 452: SPECIAL PROJECTS IN CHEMISTRY. [2, 2]  
Prerequisite: Senior standing in chemistry and permission of the instructor. An introduction to chemical research or development. Will include literature search, conferences, and laboratory. Written and oral technical reports are required. Six hours weekly.

461: INTRODUCTORY BIOCHEMISTRY. [3]  
Prerequisite: Chemistry 213-214. Chemistry and intermediary metabolism of carbohydrates, lipids, proteins, and nucleic acids. Interrelations among the carbon, nitrogen, and energy cycles. Three lecture hours.
Department of English

Professors Jackson (Chairman), S. Brown
Associate Professors Garson, Karlson, Molin, Walls
Assistant Professors L. Brown, Kelley
Acting Assistant Professors Churchman, Sakurai
Instructors Derr, Duffner, Gallehr, Gibson, Lowderbaugh, Morgan, Mussell, Palmieri
Lecturers Claiborne, Fruit, Griffin, Romans

ENGLISH

REQUIREMENTS FOR THE MAJOR

Students who will complete graduation requirements by January, 1973, may elect either of the following sets of requirements. Students who become juniors on or after September 1971, and who will graduate with the major in English in June, 1973, or thereafter must take the set of requirements listed under II.

I. In addition to the area requirements for BA degrees, students majoring in English who will complete their degree requirements before February, 1973, must complete thirty hours of advanced English course work beyond sophomore English, including English 351, 352, and six hours from English 354, 357, 358, 361, 362. It is recommended that seniors take English 451, 461, or 467.

II. In addition to the area requirements for BA degrees, students who will graduate with an English major in June, 1973, or thereafter must complete thirty hours of course work beyond sophomore English, including the following distribution:

1. One three-semester hour course from the following: English 391, General Linguistics; English 392, History of the English Language; and English 341, Chaucer.
2. One three-semester hour course from English 351, 352, Shakespeare.
3. Two courses in English literature prior to 1800 A.D. These comprise the courses in this catalog numbered from English 341, Chaucer, through 358, The Age of Johnson. One of these two courses should be in the literature of a period; these are English 342, 345, 354, 357, and 358. (English 341, Chaucer, should not be used for both this requirement and requirement I above.)
4. One three-semester hour course in American literature; these are English 381, 382, 385, 387, 388, 389, and may include English 440, Selected Studies, when it is organized on an American literature subject.

71
GEORGE MASON UNIVERSITY

COURSES

101-102: COMPOSITION AND INTRODUCTION TO LITERATURE. [3-3]
Expository writing, ranging from paragraphs to essays of some length and complexity. Study of the logical, rhetorical, and linguistic structure of expository prose. The methods and conventions of preparing research papers, and introduction to analysis and appreciation of major literary types.

203, 204: WESTERN LITERARY MASTERWORKS. [3, 3]
Prerequisite: English 101-102. Study in translation of some of the great works of Western civilization by such writers as Homer, Sophocles, Euripides, Dante, Voltaire, Flaubert, Galdos, Dostoievski, Tolstoy, Mann, Camus, Brecht, Hesse, and Sartre.

205, 206: READINGS IN ENGLISH AND AMERICAN LITERATURE. [3, 3]
Prerequisite: English 101-102. Study of English and American literature by types. English 205 is a study of selected English and American poetry and drama; such dramatists as Marlowe, Shakespeare, Shaw, O'Casey, O'Neill, and Albee are read, and such poets as Donne, Keats, Whitman, Frost, Eliot and Auden. English 206 provides study of selected English and American novels, short stories, and essays. Such fiction writers as Fielding, Lawrence, Hemingway, Joyce, Twain, Burgess and Barth are studied, and such essayists as Bacon, Thoreau, Baldwin, and Orwell.

251, 252: SURVEY OF ENGLISH LITERATURE. [3, 3]
Prerequisite: English 101-102. Study of the important literary movements and works of English literature, from beginnings to the present. Particularly recommended for prospective English majors.

The student will normally select and complete English 203, 204 or 205, 206 or 251, 252. After completing one semester of one course, the student may not shift to another course without permission of the Department of English.

English 101-102 and 203, 204 or 205, 206 or 251, 252 are prerequisites for all English 300 and 400 courses.

341: CHAUCER. [3]
A study of the major works of Chaucer, with emphasis on The Canterbury Tales.

342: LITERATURE OF THE MIDDLE AGES. [3]
A study of selected English narrative, dramatic, and homiletic literature written between 1300 and 1500 A.D., exclusive of Chaucer.

345: ENGLISH LITERATURE OF THE SIXTEENTH CENTURY. [3]
Study of the poetry and prose of the early Renaissance in England.
COURSES OF INSTRUCTION

346: SPENSER. [3]
A study of a major portion of the poetry of Edmund Spenser, with central emphasis upon *The Faerie Queene*.

351, 352: SHAKESPEARE. [3, 3]
Twenty selected plays. First semester emphasizes histories and comedies; second semester, tragedies and romances.

353: ENGLISH RENAISSANCE DRAMA. [3]
A study of major dramas and dramatists of the English Renaissance, exclusive of Shakespeare.

English poetry and prose from 1603 to 1688, excluding Milton.

355: MILTON. [3]
Study of Milton's major poetic works, with emphasis on *Paradise Lost*.

356: RESTORATION AND EIGHTEENTH-CENTURY DRAMA. [3]
Restoration comedy of manners, sentimental comedy, neo-classical tragedy, and bourgeois tragedy. Some emphasis on theories of drama, on staging, and on parallel developments in opera. Such writers as Wycherley, Farquhar, Etheredge, Congreve, Dryden, Addison, Gay, Fielding, Goldsmith, and Sheridan are studied.

357: THE AUGUSTAN AGE. [3]
Study of the development of English literature from the late seventeenth century to the middle of the eighteenth century, with emphasis on works of Dryden, Swift, and Pope.

358: THE AGE OF JOHNSON. [3]
Study of the development of English literature of the late eighteenth century; readings from Dr. Johnson and his contemporaries with attention to the pre-Romantics.

361, 362: ENGLISH POETRY OF THE NINETEENTH CENTURY. [3, 3]
A study of the major poetry of the nineteenth century. The first semester deals with the Romantic poets, the second with Victorian.

363: ENGLISH PROSE OF THE NINETEENTH CENTURY. [3]
A study of major prose writing of the nineteenth century, by such authors as Coleridge, Carlyle, Arnold, Ruskin, and Newman.

365: CONTEMPORARY ENGLISH POETRY AND PROSE. [3]
Reading and analysis of works by major English poets and prose writers from 1900 to the present.

73
GEORGE MASON UNIVERSITY

The history of the English novel with intensive critical reading of representative works. English 371 concerns the English novel from its beginnings through the mid-nineteenth century and deals with such writers as Fielding, Sterne, Austen, Emily Bronte, Thackeray, and Dickens. English 372 concerns the English novel from the mid-nineteenth century to the present and deals with such authors as Hardy, Conrad, Bennett, Forster, Lawrence, Joyce, Woolf, Huxley, Greene, Cary, Powell and Golding.

375, 376: CONTEMPORARY DRAMA. [3, 3]
An intensive study of representative plays of contemporary dramatists of Europe and America, with emphasis on dramatic styles such as realism, expressionism, and existentialism. Among the authors studied are Ibsen, Strindberg, Hauptmann, Shaw, O'Neill, O'Casey, Sartre, Lorca, Ionesco, and Brecht.

*377, 378: SELECTED CONTINENTAL NOVELS IN TRANSLATION. [3, 3]
Study of selected European novels in translation. English 377 concerns the continental novel from the eighteenth century to the end of the nineteenth century, and includes works of such writers as Balzac, Gogol, Stendhal, Turgenev, Flaubert, Dostoevsky, Tolstoy, and Galdos. English 378 deals with the continental novel from the beginning of the twentieth century to the present and includes such writers as Proust, Mann, Gide, Silone, Kafka, Sartre, Cela, Moravia, and Grass. Attention will be given to the influence of this literature on the novel in English.

381: COLONIAL AND FEDERALIST AMERICAN LITERATURE. [3]
Study of the works of authors of the first 200 years of American literature, including Edwards, Franklin, Irving, Cooper, and Bryant.

382: LITERATURE OF THE AMERICAN RENAISSANCE. [3]
A study of the major writers of the American Renaissance (1830-1865), with emphasis on the works of Emerson, Thoreau, Hawthorne, Melville, Whitman, and Poe.

A study of novels, short stories, drama, poetry, and essays of the American South, from post-World War I to recent times; the work of Southern writers, including Faulkner, Warren, Tate, Wright, Porter, McCullers, Styron, and O'Connor.

385: CONTEMPORARY AMERICAN POETRY AND PROSE. [3]
Reading and analysis of major American poets and prose writers from 1900 to the present.

*Offered in cooperation with the Department of Foreign Languages.
COURSES OF INSTRUCTION

386: LITERATURE OF BLACK AMERICA. [3]
Significant works of poetry, fiction, drama, and autobiography written by
American black writers in the twentieth century, reflecting the black
experience. Works by such authors as Toomer, Hughes, Wright, Brooks,
Ellison, Baraka, and Bullins will be studied.

387: DEVELOPMENT OF THE AMERICAN NOVEL TO 1914. [3]
A study of major American novels of the pre-World War I period with
emphasis on the work of Brown, Cooper, Hawthorne, Melville, Twain,
Howells, James, Crane, Dreiser, Norris and others.

388: DEVELOPMENT OF THE AMERICAN NOVEL SINCE 1914. [3]
A study of the American novel from the end of World War II to the
present; the course includes the work of such authors as Fitzgerald,
Hemingway, Faulkner, Dos Passos, Wolfe, Bellow, and Nabokov.

389: PLAYS OF TWENTIETH CENTURY AMERICAN DRAMATISTS. [3]
An intensive study of American drama of the twentieth century, with
special attention to the plays of Eugene O'Neil, Thornton Wilder, Arthur
Miller, Tennessee Williams, and Edward Albee.

391: GENERAL LINGUISTICS. [3]
Introduction to general linguistics: phonics, phonemics, morphology, and
syntax.

Introduction on historical principles to the development of the English
language, including study of the Indo-European family of languages, Old
English, Middle English, foreign influences on English, and the American
dialect.

394: JAPANESE LITERATURE IN TRANSLATION. [3]
Study of selected literary masterpieces in translation from ancient and
modern Japan, including a court romance (The Tale of Genji), essays (The
Pillow Book), classical poetry, noh and Bunraku plays, haiku poetry, and
modern fiction. Review of the genres and traditions represented by those
masterpieces. (Course credit accepted for the BA non-Western proviso but
not in the English major.)

395: CHINESE LITERATURE IN TRANSLATION. [3]
Study of selected masterpieces of Chinese literature in translation,
including the Confucian Classics, ancient songs and poems, T'ang and Sung
poetry and prose, Yuan and Ming plays, novels and short stories. (Course
credit accepted for the BA non-Western proviso but not in the English
major.)

396: INTRODUCTION TO CREATIVE WRITING. [3]
Introduction to the theory and practice of writing fiction, poetry, and
drama.
397: SEMINAR IN CREATIVE WRITING. [3]
Prerequisite: permission of instructor. Intensive study of the theory and practice of creative writing. Intended for students already writing original fiction, poetry, or drama. (By permission of the instructor, the course may be taken a second time for credit. The additional three hours may not, however, be counted toward the requirements for the English major.)

398: THE FILM AS NARRATIVE. [3]
Study of American and Continental films with emphasis on dramatic structure of the narrative film. Films by such directors as Welles, Kazan, Bergman, Truffaut, and Antonioni. Required viewings; student discussion and written critiques. (Course credit not accepted toward the major in English. A special fee is required for this course.)

399: TYPES OF FILM. [3]
Approaches to film through types, the films and types varying from year to year. Emphasis on narrative and dramatic structure in such types as the Western, the epic, the musical, the thriller, and situation comedy, and on scope and viewpoint in the documentary and the experimental short. Required viewings; student discussion and written critiques. (Course credit not accepted toward the major in English. A special fee is required for this course.)

430: TRAGEDY. [3]
This course traces the tragic mode as it manifests itself in various forms from Hebraic times to the present. Included are readings from the Old Testament; classical, Elizabethan, neoclassical, and modern drama; tragic poems and tragic novels. Such major authors as Homer, Aeschylus, Sophocles, Euripides, Shakespeare, Racine, Ibsen, Dostoevski, Tolstoi, and Kafka will be studied.

431: COMEDY. [3]
This course explores the comic vision as it manifests itself in major literary works of a variety of periods and types: classical andneo-classical comic drama; non-classical and modern forms of comic drama; and comic poems and comic novels. Such major comic authors as Aristophanes, Jonson, Shakespeare, Moliere, Fielding, Dickens, Barth, and Beckett will be studied.

440: SELECTED STUDIES IN MAJOR ENGLISH AND AMERICAN WRITERS. [3]
Study in depth of two or more selected English or American novelists, poets, or dramatists, as announced.

451: INTRODUCTION TO LITERARY CRITICISM. [3]
This course is intended primarily for English majors in their senior year. Others may be admitted with permission of the instructor. Study of the major critical theories and techniques of the twentieth century. Exercises in critical analysis.
COURSES OF INSTRUCTION

467: EXPOSITORY WRITING. [3]
Theory and practice of advanced expository writing; practice in analyzing and writing essays, articles, and other expository forms. (Not a remedial course.)

470: INDEPENDENT STUDY. [3, 3]
Prerequisite: permission of department and instructor. Open only to English majors with senior standing and fifteen credit hours in 300 and 400 level English courses.

Intensive study of a particular author, genre, period, or critical or theoretical problem in literature or linguistics, to be conducted by an individual student in close consultation with an instructor. The student will produce at least one major piece of written work during the semester on the findings of his research. A student may not present more than six hours of independent study for graduation credit.

JOURNALISM COURSES

201: INTRODUCTION TO JOURNALISM. [3]
Principles of and practice in news writing, editing, and layout. Includes a review of the history of American journalism.

SPEECH COURSES

151: PRINCIPLES OF EFFECTIVE SPEAKING. [3]
An introduction to the techniques of effective oral presentation, emphasizing impromptu and extemporaneous speaking.

152: PUBLIC SPEAKING. [3]
Prerequisite: Speech 151. A study of principles and types of public address, with emphasis on expository and persuasive speaking. Intensive practice in composition and delivery.

251: INTRODUCTION TO GROUP CONFERENCE. [3]
Introduction to group conference, with development of participant and leadership skills. Preliminary study of group dynamics. Participation in practice conferences.

255: FUNDAMENTALS OF ORAL INTERPRETATION. [3]
Prerequisite: Speech 151 or permission of the instructor. A study of the principles involved in the oral communication of the written word in its intellectual, emotional and aesthetic entirety. Practice in the oral communication of prose and poetry.

260: INTRODUCTION TO PLAY PRODUCTION. [3]
A lecture-workshop course studying the aspects of producing a play (designing, directing, writing, and acting) in makeshift theaters. Student crew work on play production as well as classwork.
Department of Foreign Languages

Associate Professors Elstun (Chairman), Arriola
Assistant Professors Aguera, Brooks, Bufill, Cordero, Evans, Font, Hobson, Meyer, Rodriguez, Sehrt
Instructors Jansen, LePage, Urso, Wekerle
Lecturers Castillo, Grimes, Hazera, Morlang

GENERAL. Advances in global communications have so compressed time and space that we have achieved instant awareness of events anywhere in our world. The reactions of people are immediate; misinterpretation can precipitate instant catastrophe. For a nation to follow a prudent yet rational course, its people must be educated as positive, active, productive citizens of a community of nations. If we are to understand the past and the present of even our own nation, the mastery of at least one language other than our native tongue is essential; it is also a means of achieving human understanding and of placing the human experience in proper context. As a distinguished scholar eloquently put it: “One language alone is a barrier to understanding . . . Two languages are the beginning of a bridge . . . the beginning of mutual understanding among men who are one in their humanity.”

FRENCH

REQUIREMENTS FOR THE MAJOR

The degree program in French prepares students for teaching French at the secondary level, for graduate study in French, or for positions in government or private enterprise that require a knowledge of French.

Twenty-four hours of work in advanced French courses are required for the major. French 351 and French 353, 354 are required courses for majors. To major in French, a student should have at least a “C” average in his previous French courses.

COURSES

151-152: ELEMENTARY FRENCH. [4-4]
Intensive introduction to French, including basic grammar, reading, aural training and the development of oral skills. Four classroom hours and two laboratory hours per week.

An intensive review of the grammar, syntax and pronunciation taught in French 151-152; designed for students who have had two years of secondary school French but whose proficiency does not qualify them for French 251. Students may not receive credit for both French 151-152 and 153. Four classroom hours, two laboratory hours per week.
251: INTERMEDIATE FRENCH. [4]
Prerequisite: French 151-152 or equivalent. Intensive review of basic grammar; introduction to more difficult grammatical constructions and patterns of usage; continued development of reading proficiency and of aural and oral skills. Four classroom hours, two laboratory hours per week.

252 to 255: Application of the language skills acquired in French 151-152, 251 in one or more of the following subject areas, which may be studied singly, concurrently, or in any order.

252: FRENCH CONVERSATION. [3]
Prerequisite: French 251 or equivalent. Development of oral proficiency in French. Twelve selected topics that touch on various practical aspects of everyday life.

253: FRENCH CULTURE. [3]
Prerequisite: French 251 or equivalent. An introduction to the background of French life and culture.

254: READING AND TRANSLATION OF FRENCH SCIENTIFIC TEXTS. [3]
Prerequisite: French 251 or equivalent. Reading and translation of selected texts in the various sciences; introduction of basic scientific vocabulary.

255: FRENCH LITERARY MASTERPIECES. [3]
Prerequisite: French 251 or equivalent. Reading and discussion of selected works of French literature.

256: FRENCH PRONUNCIATION. [3]
Prerequisite: French 251 or equivalent. Analytical description of French speech and pronunciation practice with emphasis on exercises designed specifically for the Anglo-American student. Three classroom hours, two laboratory sessions per week.

351: ADVANCED FRENCH GRAMMAR. [3]
Prerequisite: French 251 or permission of instructor. Required in the major program. A study of the phonology, syntax and morphology of modern standard French.

353, 354: ADVANCED CONVERSATION AND COMPOSITION. [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of the instructor. Required in the major program. Written and oral reports and conversation on political, literary and artistic topics and current events.

361, 362: FRENCH STRUCTURE. [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of the instructor. (Offered in 1973-74 and alternate years.) A course in phonetics, phonemics, morphemics and syntax of modern standard
GEORGE MASON UNIVERSITY

French. *Three classroom hours per week, laboratory session at the discretion of the instructor.*

375, 376: FRENCH CULTURE AND CIVILIZATION. [3, 3]
Prerequisite: French 253 or permission of the instructor. Offered in 1972-73 and alternate years. A study of the outstanding contributions of France to world civilization from medieval times to the present, with emphasis on the development of her ideas, arts, sciences, and institutions.

377, 378: SURVEY OF FRENCH LITERATURE. [3, 3]
Prerequisite: French 255 or permission of the instructor. A survey of French literature from the *Chanson de Roland* to the present, with close readings of works of representative major writers through the centuries.

411, 412: FRENCH LITERATURE OF THE TWENTIETH CENTURY. [3, 3]
Prerequisite: French 255 or permission of the instructor. Principal literary trends and genres in French literature since 1900. French 411 studies such authors as Proust, Gide, Claudel and Valery. French 412 deals with Existentialism, the "Nouveau Roman," and the "Nouveau Theatre." Representative authors such as Sartre, Camus, Robbe-Grillet, Butor, Ionesco and Beckett are studied.

415, 416: FRENCH LITERATURE OF THE NINETEENTH CENTURY. [3, 3]
Prerequisite: French 255 or permission of the instructor. The poetry, theatre, and novel of the romantic, realist, and symbolist periods; authors to be studied in the first semester include Lamartine, Hugo, Stendhal, Balzac; in the second semester, Flaubert, Baudelaire, Rimbaud, Mallarme, Verlaine, Zola.

419, 420: FRENCH LITERATURE OF THE EIGHTEENTH CENTURY. [3, 3]
Prerequisite: French 255 or permission of the instructor. The study of Voltaire, Montesquieu, Rousseau and Diderot, whose major writings reflect the political, philosophical, social and artistic ideas of "l'age des Lumieres."

423, 424: FRENCH LITERATURE OF THE SEVENTEENTH CENTURY. [3, 3]
Prerequisite: French 255 or permission of the instructor. A study of the Classical period. Reading and class discussion of the principal masterpieces of the century, with emphasis on Descartes, Pascal, Corneille, Racine, Moliere and LaFontaine. Other significant works are studied in the light of their relation to literary, ideological and social currents in France from the Age of the Baroque to the Querelle des Anciens et des Modernes.

427: FRENCH LITERATURE OF THE RENAISSANCE. [3]
Prerequisite: French 255 or permission of the instructor. Renaissance and
COURSES OF INSTRUCTION

Humanism in France in the sixteenth century. A survey in historical sequence of the major trends of French prose and poetry from Marot to the Pleiade, from Rabelais to Montaigne.

433: FRENCH STYLISTICS. [3]
Prerequisite: Fifteen semester-hours of French or permission of the instructor. Methods and terminology for critical analysis of French style; reading of appropriate texts and writing of exercises.

434: PROSEMINAR. [3]
Prerequisite: three years of college French or equivalent. Intended mainly for French majors. Conducted as a discussion group with emphasis on selected topics and individual problems.

GERMAN

REQUIREMENTS FOR THE MAJOR

The major in German prepares students for teaching careers on the secondary school level, for graduate study in Germanic languages and literature, and for research and professional work in government and private enterprise.

Completion of twenty-seven hours of work in German courses beyond the 254-level is required for the major. It is recommended that the major also complete one or both of the following related courses: English 391 and History 314. To major in German, a student should have at least a “C” average in previous German courses.

COURSES

151-152: ELEMENTARY GERMAN. [4-4]
Intensive introduction to German, including basic grammar, reading, aural training and the development of oral skills. Four classroom hours, two laboratory hours per week.

An intensive review of the grammar, syntax and pronunciation taught in German 151-152; designed for students who have had two years of secondary school German but whose level of proficiency does not qualify them for German 251. Four classroom hours, two laboratory hours per week. Students may not receive credit for both 151-152 and 153.

251: INTERMEDIATE GERMAN. [4]
Prerequisite: German 151-152 or equivalent. Intensive review of basic grammar; introduction to more difficult grammatical constructions and patterns of usage; continued development of reading proficiency and of aural and oral skills. Four classroom hours, two laboratory hours per week.
252 to 254: Application of the language skills acquired in German 151-152 and 251, in one or more of the following subject areas, which may be studied singly, concurrently, or in any order.

252: GERMAN COMPOSITION AND CONVERSATION. [3]
Prerequisite: German 251 or equivalent. Development of oral proficiency and skill in writing through conversation and composition on topics related to the practical aspects of everyday life.

253: SCIENTIFIC GERMAN. [3]
Prerequisite: German 251 or equivalent. The student becomes acquainted with specific terminology and structure of scientific texts through supervised readings and translation of materials from the scientific fields.

254: READINGS IN GERMAN LITERATURE. [3]
Prerequisite: German 251 or equivalent. Selected works of major German writers of the modern era are read and discussed. Prerequisite for German courses on the 300 and 400 level.

311: ADVANCED GERMAN GRAMMAR AND STYLISTICS. [3]
Prerequisite: German 254 or permission of instructor. Instruction in the analysis and use of complex language structures. Writing exercises, translations into German, classroom discussions, and study of basic reference works. Primarily for majors.

314: ADVANCED CONVERSATION AND COMPOSITION. [3]
Prerequisite: German 254 or permission of instructor. Development of verbal skills and proficiency in composition beyond the 252-level; frequent oral and written reports based on topical and cultural materials.

351, 352: GERMAN LITERATURE FROM ITS BEGINNINGS TO 1750. [3, 3]
Prerequisite: German 254 or permission of instructor. German 351: early German literature from the heroic saga to the decline of the Middle Ages, with emphasis on the courtly epics and the lyrics of Walther von der Vogelweide. German 352: literature of the Renaissance and Reformation, Baroque and the advent of the Enlightenment.

361, 362: GERMAN LITERATURE OF THE ROMANTIC ERA. [3, 3]
Prerequisite: German 254 or permission of instructor. German 361 consists of works by Jean Paul, Kleist, the theoretical and literary writings of the earlier Romantic poets Schlegel, Tieck, Novalis, and of the philosophers Schelling and Schleiermacher. German 362 studies the younger Romantic writers Arnim, Brentano, Eichendorff and E.T.A. Hoffmann, as well as their collections of folk songs and tales.

Prerequisite: German 254 or permission of instructor. Study of the
literature of Enlightenment, Storm and Stress, and Classicism. Emphasis in the first semester is on works of Lessing, Herder and the younger Goethe; the second semester is a study of Goethe's later works and the major writings of Schiller and Holderlin.

409: GERMAN LITERATURE FROM THE END OF ROMANTICISM TO 1880. [3]
*Prerequisite:* German 254 or permission of instructor. Study of the literature of Young Germany, Biedermeier and Poetic Realism; the prose, drama, and lyric poetry of Heine, Hebbel, Buchner, Stifter, Storm, Keller, Meyer, and Fontane will be read and discussed.

411, 412: GERMAN LITERATURE SINCE 1880. [3, 3]
*Prerequisite:* German 254 or permission of instructor. A study of the major literary movements since 1880. German 411 examines Naturalism, Impressionism, the works of the fin de siecle writers, and Expressionism. German 412 presents the literary trends since 1925, including the work of Thomas Mann, Brecht, Hesse, Boll, Celan, Eich, Grass, Frisch and Durrenmatt.

420: LINGUISTICS OF MODERN GERMAN. [3]
*Prerequisite:* German 254 or permission of instructor. A study of the German language based on the principles of descriptive linguistics. The course includes a brief outline of the development of modern German and an analysis of its phonology, morphology and syntax. Particularly valuable to the student who intends to teach or undertake graduate study in German.

425, 426: INDEPENDENT STUDY. [3, 3]
*Prerequisite:* three years of college German or the equivalent, and permission of the department chairman. Research and analysis of an individually selected problem in literary criticism or linguistics.

PORTUGUESE

151-152: ELEMENTARY PORTUGUESE. [4-4]
*Offered fall and spring semesters, 1972-73.* Intensive introduction to Portuguese, including basic grammar, reading, aural training and the development of oral skills. *Four classroom hours, two laboratory hours per week.*

251: INTERMEDIATE PORTUGUESE. [4]
*Offered fall semester, 1973.* *Prerequisite:* Portuguese 151-152 or equivalent. Intensive review of basic grammar; introduction to more difficult grammatical constructions and patterns of usage; continued development of reading proficiency and of aural and oral skills. *Four classroom hours, two laboratory hours per week.*
RUSSIAN

151-152: ELEMENTARY RUSSIAN. [4-4]
Offered fall and spring semesters, 1972-73. Intensive introduction to Russian, including basic grammar, reading, aural training and the development of oral skills. *Four classroom hours, two laboratory hours per week.*

251: INTERMEDIATE RUSSIAN. [4]
Offered fall semester, 1973. Prerequisite: Russian 151-152 or equivalent. Intensive review of basic grammar; introduction to more difficult grammatical constructions and patterns of usage; continued development of reading proficiency and of aural and oral skills. *Four classroom hours, two laboratory hours per week.*

SPANISH

REQUIREMENTS FOR THE MAJOR

The degree program in Spanish prepares the major to teach Spanish on the secondary school level, to undertake graduate study in Spanish, or to qualify for positions in government and industry that require a knowledge of Spanish.

Twenty-four hours of work in Spanish courses beyond the 257-level are required for the Spanish major. The student who majors in Spanish will also find it useful to complete some or all of these related courses: English 203, 204 (Western Literary Masterpieces), English 391 (General Linguistics), and History 361, 362 (Latin-American History).

COURSES

151-152: ELEMENTARY SPANISH. [4-4]
Intensive introduction to Spanish, including basic grammar, reading, aural training and the development of oral skills. *Four classroom hours, two laboratory hours per week.*

An intensive review of the grammar, syntax and pronunciation taught in Spanish 151-152; designed for students who have had two years of secondary school Spanish but whose proficiency does not qualify them for Spanish 251. *Students may not receive credit for both Spanish 151-152 and 153.* Four classroom hours, two laboratory hours per week.

251: INTERMEDIATE SPANISH. [4]
Prerequisite: Spanish 151-152 or equivalent. Intensive review of basic grammar; introduction to more difficult grammatical constructions and patterns of usage; continued development of reading proficiency and of aural and oral skills. *Four classroom hours, two laboratory hours per week.*
COURSES OF INSTRUCTION

252 to 257: Application of the language skills acquired in Spanish 151-152 and 251, in one or more of the following areas, which may be studied concurrently or in any order.

252: SPANISH CONVERSATION AND COMPOSITION. [3]
Prerequisite: Spanish 251 or equivalent. Development of the student's ability to express himself orally on topics of current interest and everyday situations; compositions will provide practice in more difficult forms of expression.

253: COMMERCIAL SPANISH. [3]
Prerequisite: Spanish 251 or equivalent. Introduction to the terminology and usage of Spanish in business transactions; practice in the composition of business reports and letters is stressed.

254: SPANISH CIVILIZATION. [3]
Prerequisite: Spanish 251 or equivalent. An introduction to the civilization and culture of Spain; in addition to reading, the course will include slides, music, and field trips, to increase the student's direct appreciation of Spain's distinctive heritage.

255: LATIN AMERICAN CIVILIZATION. [3]
Prerequisite: Spanish 251 or equivalent. Introductory study of Latin American civilization, with emphasis upon its cultural, historical, and artistic aspects. Films, music, and field trips will supplement the readings.

256: READINGS IN SPANISH LITERATURE. [3]
Prerequisite: Spanish 251 or equivalent. Masterpieces of Spanish literature providing insight into the essential ideas and culture of Spain; the readings will include one novel, one drama, and a carefully selected sampling of short stories and poetry.

257: READINGS IN LATIN AMERICAN LITERATURE. [3]
Prerequisite: Spanish 251 or equivalent. An introduction to the literature of Hispanic America through the reading and discussion of short stories, a novel, a play, and selected poetry of its major literary figures.

300: SPANISH CIVILIZATION AND CULTURE. [3]
Prerequisite: fifteen semester-hours of Spanish or permission of instructor. A survey of Spanish culture and civilization from the Pre-Roman era to the twentieth century. Primarily for Spanish majors.

303, 304: ADVANCED CONVERSATION AND COMPOSITION. [3, 3]
Prerequisite: Spanish 252 or permission of the instructor. These courses are structured to emphasize development of the skills required both to speak and to write Spanish correctly. They are prerequisites for most Spanish courses at more advanced levels.
305, 306: SURVEY OF SPANISH LITERATURE. [3, 3]
Prerequisite: Spanish 303, 304 or permission of the instructor. A survey of Spanish peninsular literature. During the first semester important authors and major movements from medieval times through the eighteenth century will be studied; the second semester will include authors and movements of the nineteenth and twentieth centuries. Collateral readings and reports on some authors are required. These courses are taught entirely in Spanish.

307, 308: LATIN AMERICAN LITERATURE. [3, 3]
Prerequisite: Spanish 303, 304 or permission of the instructor. A survey of the development of the poetry, novel, drama, essay and short story in Spanish America from the colonial period to the present. Spanish 307 studies the literature of Spanish American countries from colonial times to the twentieth century; Spanish 308 is a study of twentieth century literature. Collateral readings. Recommended for Spanish majors.

309, 310: LITERATURE OF THE GOLDEN AGE. [3, 3]
Prerequisite: Spanish 303, 304 or permission of the instructor. Advanced study of major literary works of the Spanish Golden Age (1517-1680), with emphasis on the works of Cervantes, Lope de Vega, Tirso de Molina, Ruiz de Alarcon, Quevedo and Calderon.

313, 314: SPANISH LITERATURE OF THE NINETEENTH CENTURY. [3, 3]
Prerequisite: Spanish 303, 304 or permission of the instructor. A study of the major works of nineteenth-century Spanish literature. The first semester covers works of such authors as Duque de Rivas, Zorrilla, Alarcon and Galdos; the second semester studies the works of such figures as Becquer, Clarin, Blasco Ibanez and Ruben Dario.

315: LATIN AMERICAN CIVILIZATION AND CULTURE. [3]
Prerequisite: Fifteen semester-hours of Spanish or permission of the instructor. Introductory study of Latin American civilization and culture, with supporting study of the history of the continent. The course is conducted in Spanish.

320: LINGUISTICS OF THE SPANISH LANGUAGE. [3]
Prerequisites: 303, 304 and 305, 306, or permission of the instructor. A general introduction to linguistics; a brief study of the evolution of Spanish from its Latin origins to contemporary speech, and a brief review of morphology, syntax and phonology, with emphasis on the latter. This course is invaluable to Spanish majors planning to teach Spanish or contemplating graduate work.

400: STYLISTICS. [3]
Prerequisites: Spanish 303, 304 and at least twelve hours in the literature of the Spanish language. A study of genres and literary styles; application of the material studied, through creative and translational written exercises. Recommended for senior majors in Spanish.
COURSES OF INSTRUCTION

401: LATIN AMERICAN POETRY. [3]
Prerequisite: Spanish 307, 308 or permission of the instructor. Study of the most representative lyric poets of Latin America from the colonial period to the present. Special attention will be given to the poetry of Martí, Dario, Lugnoes, Vallejo, Huidobro, Neruda, Mistral, Vilaurrutia, and Paz.

403, 404: CONTEMPORARY SPANISH LITERATURE. [3, 3]
Prerequisites: 303, 304 and 305, 306, or permission of the instructor. The first semester examines in depth the main authors of the “generation of ’98” including: Unamuno, Valle-Inclan, Baroja, Azorín, Benavente, and Antonio Machado. The second semester includes an analysis of contemporary post-Civil War authors: Cela, Laforet, Delibes, Buero Vallejo, Sastre, Sanchez Ferlosio, Garcia Lorca, Jimenez, Guillén Aleixandre, and Salinas. The various genres are studied in the works of these leading writers.

407, 408: LATIN AMERICAN NOVEL AND SHORT STORY. [3, 3]
Prerequisite: Spanish 307, 308 or permission of the instructor. The evolution and development of the novel and short story in Latin America, from colonial times to the present. A panoramic study, including the most representative works, will be completed. Collateral readings will be required.

410: CERVANTES. [3]
Prerequisite: Spanish 303, 304 or permission of the instructor. A study of the major works of Cervantes, with emphasis on Don Quixote.

412: SPECIAL STUDIES IN LATIN AMERICAN LITERATURE. [3]
Prerequisite: Spanish 307, 308 or permission of the instructor. Special studies in the drama, essay, or other genres of Latin American literature.

415: READINGS IN MEDIEVAL SPANISH LITERATURE. [3]
Prerequisite: Spanish 305, 306 or permission of the instructor. A study of the major works of medieval Spanish literature, especially of El Cid, and the works of Berceo, Ruiz, Manuel, Santillana, Manrique, and Rojas.

425, 426: INDEPENDENT STUDY. [3, 3]
Prerequisite: Permission of Department Chairman and Instructor. Open only to Spanish majors with senior standing. Intensive study of a genre, period or theme in Spanish literature conducted by an individual student in close consultation with an instructor. The student will produce at least one term paper on an important aspect of his readings and research.
Department of History

Professor Cassara (Chairman)
Associate Professors Boothe, Pugh, Spence
Assistant Professors Gleissner, Hawkes, Jensen, Pacheco, Rinehart, Saeed,
Soder, Spindler
Instructor Cohen, M.
Lecturers Deshmukh, Levering, Nwulia

REQUIREMENTS FOR THE MAJOR

Candidates for the Bachelor of Arts degree in history shall present, in addition to the general requirements, thirty-three hours of history and must include at least three hours of historiography or senior seminar. At least eighteen hours of the total presented for the degree must consist of work in the 300 or 400 series. Not more than forty-two hours may be counted toward completion of the program, but hours of history in excess of that number may be presented as elective hours to be counted toward graduation. The history major should plan a diversified program of varied historical fields (e.g., U.S., Europe, Latin America, Asia).

COURSES

(Course numbers in parentheses show former catalog listing.)

101, 102: HISTORY OF WESTERN CIVILIZATION. [3, 3]
The historical development of western institutions, ideas, and cultures from antiquity to modern times.

121: FORMATION OF THE AMERICAN REPUBLIC. [3]
The social, political, economic, and intellectual growth of American institutions from colonization through the Civil War. Emphasis is placed on the formation of the Union and its subsequent industrial, social, and political growth to 1865.

122: DEVELOPMENT OF MODERN AMERICA. [3]
History of the United States from 1865 to the present. Territorial expansion; Reconstruction and reaction; imperialism; industrialism, individualism, and opportunity; the time of social protest; the era of war and prosperity; economic collapse and the New Deal; the end of isolation; the sources and problems of world leadership and power.

241, 242: A SURVEY OF EAST ASIAN CIVILIZATION. [3, 3]
A survey of the history of China, Japan, Korea, and Vietnam from the pre-historic period to the present.
COURSES OF INSTRUCTION

261, 262: SURVEY OF AFRICAN CIVILIZATION. [3, 3]
A survey of the history and cultural development of Africa and the African peoples from earliest times to the emergence of new African states from colonial domination. Particular attention is paid to Africa south of the Sahara, its unique and diverse cultural traditions, its relations with and effect on the rest of the world, as well as the contribution of the African heritage to the United States.

281, 282: SURVEY OF MIDDLE EASTERN CIVILIZATION. [3, 3]
A survey of the history of the major civilizations of the Middle East with particular attention to cultural, intellectual, social and political developments.

301: HISTORY OF THE ANCIENT WORLD. [3]
Prerequisite: Six hours of history. A survey of the history of classical Greece and Rome, with particular attention to their cultural traditions, spiritual values, intellectual development, and political structures; early Christianity, its roots in Judaism and Greek thought, and growth within the context of the Roman Empire; the decay of the Western Empire; the early history of the Byzantine State.

302 (201): MEDIEVAL EUROPE. [3]
Prerequisite: Six hours of history. European history from the fourth to the twelfth centuries: The decay of Roman authority and the emergence of Germanic power in the West; the role of the Church in early medieval society, the patristic tradition, the growth of the Papacy; the influence of Islam and the Byzantine Empire; the Carolingians and the “New Europe”; development of feudalism; Empire and Papacy. Emphasis on papal and imperial ideologies.

303 (202): MEDIEVAL EUROPE. [3]
Prerequisite: Six hours of history. The High Middle Ages through the fifteenth century: The “Gothic World” of the twelfth and thirteenth centuries; the Crusades and the expansion of Europe; the triumph of the Papacy; growth of the secular state; doubt, plague, war, and the breakdown of the medieval consensus. Emphasis on cultural, social, and intellectual history and the development of political institutions.

306: RENAISSANCE AND REFORMATION. [3]
Prerequisite: Six hours of history. The history of late medieval and Renaissance Italy with particular attention to literature, art, and philosophy. Europe in the late fifteenth and sixteenth centuries; humanist reformation, Protestant Reformation, and Counter-Reformation.

307: EUROPE FROM LOUIS XIV TO THE CONGRESS OF VIENNA.
[3]
Prerequisite: Six hours of history. The history of western Europe from 1648 to 1815: transition of political, economic, and social institutions to their modern forms; secularized products of religious revolt; expansion of
GEORGE MASON UNIVERSITY

European influence; scientific and philosophical revolutions; the Enlightenment; the French Revolution and Napoleonic Wars.

308: NINETEENTH CENTURY EUROPE. [3]
Prerequisite: Six hours of history. The history of Europe from the Congress of Vienna to the outbreak of World War I: political and diplomatic developments; social and economic change; growth of liberalism, nationalism, and revolutionary ideologies; industrialization, technology, and materialism; cultural norms; unification movements and Irridentism; Imperialism; the failure of diplomacy and the collapse of the European state system.

309 (405): HISTORY OF EUROPE SINCE 1914. [3]
Prerequisite: Six hours of history. A survey of major political changes in Europe since 1914 with emphasis upon broad patterns of ideological conflict.

314: HISTORY OF GERMANY. [3]
Prerequisite: Six hours of history. History of the political, diplomatic, economic, social and cultural development of Germany from the dissolution of the Holy Roman Empire to the present.

323 (331): ENGLAND THROUGH THE REVOLUTION OF 1688. [3]
Prerequisite: Six hours of history. The development of modern England from the time of the Roman invasion through the Revolution of 1688. Roman Britain; Anglo-Saxon England; the Norman Conquest; the Angevin empire; town and country life; constitutional development; social, economic, and religious growth; Catholicism versus Protestantism; King against Parliament; Civil War and Interregnum; Restoration and the Revolution.

324 (332): ENGLAND FROM THE REVOLUTION OF 1688. [3]
Prerequisite: Six hours of history. History of England from 1688 to the present. Stuart England; political leadership; the Napoleonic era; growth of industrialization and its social and economic consequences; the period of reform; foreign affairs and imperialism, 1865-1905; the transition from Empire to Commonwealth; the role of Britain in the mid-twentieth century.

325 (431): TUDOR AND STUART ENGLAND. [3]
Prerequisite: Six hours of history. A history of England from the Battle of Bosworth Field to the accession of George I.

328 (441): RISE OF RUSSIA. [3]
Prerequisite: Six hours of history. An examination of the political, social, and cultural experience of Russia from the appearance of the Kievan state to the age of Pushkin.
COURSES OF INSTRUCTION

329 (442): MODERN RUSSIA AND THE SOVIET UNION. [3]
Prerequisite: Six hours of history. An analysis of Russian civilization in the nineteenth and twentieth centuries, focusing on the failure of Tsarism, the revolutionary response, and the development of the Soviet Union.

333 (221): WESTWARD MOVEMENT IN THE UNITED STATES. [3]
Prerequisite: Six hours of history. The history of the exploration, settlement, and expansion of the frontier, with emphasis on its influence upon cultural and political institutions.

343, 344 (421, 422): DIPLOMATIC HISTORY OF THE UNITED STATES. [3, 3]
Prerequisite: Six hours of history. A survey of American diplomatic history from 1781 to the present. Emphasis is placed upon the domestic and external forces that have shaped American diplomacy and its conduct. The second semester begins at 1914.

348 (427): AMERICAN ECONOMIC HISTORY. [3]
Prerequisite: Six hours of history. A general survey of the history of American economic thought and development from colonial times to the present with stress upon the growth of modern economic institutions and the role of economic factors in the evolution of contemporary industrial America.

Prerequisite: Six hours of history. The history of the South to the outbreak of the Civil War, with particular emphasis on the rise of sectionalism. The development of a distinct southern culture is traced through the emergence of economic, political, social, agricultural and intellectual institutions.

352: THE SOUTH SINCE 1865. [3]
Prerequisite: Six hours of history. The history of the South during Reconstruction, the Redeemer era, and the New South, with particular emphasis on race relations. The political, economic, cultural, and intellectual development is traced from the aftermath of war through the South’s twentieth century struggle to rejoin the mainstream of American life.

Prerequisite: Six hours of history. Latin-American history to 1825, with emphasis upon indigenous Indian civilizations, transplantation of Hispanic and African cultures to the New World and the political, economic, social, and cultural results; Spanish-Portuguese explorations and conquests; colonial development of Latin America; the wars for independence.

Prerequisite: Six hours of history. The development of an independent
Latin America since 1825. Emphasis is on the interactions between the United States and Latin America.

363: THE HISTORY OF ARGENTINA, BRAZIL, AND CHILE. [3]  
Prerequisite: History 361, or permission of instructor. An intensive study of the evolution of Argentina, Brazil, and Chile from the Colonial Period to the present with an emphasis upon the changing social, political, and economic conditions.

370: THE DIPLOMATIC HISTORY OF LATIN AMERICA. [3]  
Prerequisite: History 362 or permission of instructor. A careful treatment of political, social and cultural relations of the Latin American states with each other, the United States, Europe and the papacy from independence to the present. Emphasis will be placed upon the operation of a system of international power politics in Latin America.

382: EAST ASIAN CIVILIZATION IN THE TWENTIETH CENTURY. [3]  
Prerequisite: Six hours of history. An intensive study and analysis of the histories of China, Japan, Korea, and Vietnam since 1911.

401 (345): COLONIAL AMERICA. [3]  
Prerequisite: Six hours of history. An intensive study of colonial American history from its European origins through the Revolutionary War.

Prerequisite: Six hours of history. An inquiry into the cultural and intellectual currents in America to 1865. The Puritan mind and its legacy; the Enlightenment in America; American nationalism; the rise of social democracy; development of American liberalism and conservatism; revivalism and other religious developments; industrialism, liberal capitalism, and the idea of progress.

412 (342, 322): CULTURAL AND INTELLECTUAL HISTORY OF THE UNITED STATES SINCE 1865. [3]  
Prerequisite: Six hours of history. American thought and society from 1865 to the present. The effects of industrialization upon basic American institutions; development of a business “credo”; the growth of radical thought in economics, politics and religion; changes in the social structure; the increasing power and influence of the state.

433 (359): THE UNITED STATES IN THE TWENTIETH CENTURY. [3]  
Prerequisite: Six hours of history or permission of instructor. An intensive study of the United States and its role in world affairs since World War I: post-war adjustment, false prosperity of the twenties, the great crash and depression, the New Deal, farm and labor problems; isolation and
neutrality, World War II, the Cold War and containment, Korean War and problems associated with the Vietnam conflict.

438: SPANISH BORDERLANDS. [3]
Prerequisite: Six hours of history. The United States frontier from the Carolinas to the Pacific considered as a part of the Kingdom of New Spain, and later, the United Mexican States, 1500-1848: expeditions of discovery, exploration, and settlement; political, cultural, and social developments; foreign encroachment; incorporation of the area into the United States; and origins of the present Mexican-American minority.

443 (310, 408): HISTORY OF SPAIN AND PORTUGAL. [3]
Prerequisite: Six hours of history. Development of Spain and Portugal from prehistoric times to the present, noting particularly factors related to their former empires in America.

453 (364): HISTORY OF MEXICO. [3]
Prerequisite: Six hours of history or permission of instructor. Intensive study of Mexican history from the pre-Columbian era to the present, with emphasis upon the national period.

464: MODERN INDIA AND PAKISTAN. [3]
Prerequisite: Six hours of history. The political history of the Indo-Pakistan subcontinent from mid-eighteenth century to the present. Background of the earlier cultures of the Hindus and of the Muslims will be presented as prelude to developments in the modern period.

491, 492 (461, 462): SENIOR SEMINAR IN HISTORY. [3, 3]
Prerequisite: Open only to senior majors in history with consent of instructor. A student may not present more than six hours of seminar for graduation credit. Intensive research on a specialized historical topic culminating in the production of a seminar paper. Subject will be determined by the instructor conducting the section, and may be obtained from him in advance.

493, 494 (471, 472): DIRECTED READINGS IN HISTORY. [3, 3]
Prerequisite: Open only to senior majors in history with consent of instructor. A student may not present more than six hours of directed readings for graduation credit. A rigorous examination of the literature on a specialized topic in history, to be conducted on an individual basis in consultation with the instructor.

497 (480-A): AMERICAN HISTORIOGRAPHY. [3]
Prerequisite: Open only to senior majors in history with consent of the instructor. An examination of the methods used in the study and writing of history. Research techniques. Reading of the works of major American historians from the Colonial Period to the present.
498 (480-B): EUROPEAN HISTORIOGRAPHY. [3]
Prerequisite: Open only to senior majors in history with consent of the instructor. An examination of the methods used in the study and writing of history. Research techniques. Reading of the works of major European historians from Herodotus to the present.
Department of Humanities

Professor McFarlane (Chairman)
Associate Professor Kreilkamp
Assistant Professors Burt, McDaniel, McDermott, Swann
Acting Assistant Professors Kanyan, King, Yance
Instructor Pielke
Lecturers Bergoffen, Holman, Roberts

ART COURSES

101, 102: ART APPRECIATION. [3, 3]
Prerequisite: Art 101 is prerequisite for Art 102. A general introduction to the principles of aesthetics in art by means of a study in painting, sculpture and architecture from prehistoric times to the present.

103, 104: DRAWING. [3, 3]
Prerequisite: Art 103 is prerequisite for Art 104. Elementary course in representational drawing and expressive pictorial design. Six hours per week.

201, 202: OIL PAINTING. [3, 3]
Prerequisite: Art 201 is prerequisite for Art 202. A basic course in the fundamentals of oil painting. Six hours per week.

211, 212: BEGINNING LIFE DRAWING. [3, 3]
Prerequisite: Art 103 and 104, or permission of the instructor. A basic course in the fundamentals of drawing the human model. Six hours per week.

215, 216: BEGINNING SCULPTURE. [3, 3]
Prerequisite: Art 103 and 104, or permission of the instructor. A basic course in the fundamentals of creating three-dimensional forms using water-base clay. Six hours per week.

221, 222: HISTORY OF ANCIENT ART. [3, 3]
A broad, generic course in the aesthetics and art history of ancient cultures.

231, 232: HISTORY OF MODERN ART. [3, 3]
A brief review of the nineteenth century art styles, followed by an in-depth study of the aesthetics and history of art since 1900. Such styles as Expressionism, Cubism, Dadaism, Surrealism, Modern Primitivism and others will be covered.
GEORGE MASON UNIVERSITY

MUSIC

REQUIREMENTS FOR THE MAJOR

The major program in music prepares students for graduate study in music and music literature, and for research and professional work in musical activities. Entrance to the program is by audition only.

In addition to the general requirements for the Bachelor of Arts degree, music majors must complete a minimum of 42 hours in music. Required courses in music are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Harmony</td>
<td>12</td>
</tr>
<tr>
<td>Sight Singing and Ear Training</td>
<td>4</td>
</tr>
<tr>
<td>Historical, Theoretical, and Analytical Study of Music</td>
<td>9*</td>
</tr>
<tr>
<td>Class Piano</td>
<td>2</td>
</tr>
<tr>
<td>Major Instrument or Voice (Private Music Lessons)</td>
<td>8</td>
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<tr>
<td>Ensemble</td>
<td>7</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
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COURSES

101: MUSIC APPRECIATION I. [3]
An introduction to music appreciation through formal and aesthetic principles. The elements of music are examined separately and as combined in various musical forms. A brief survey of Medieval and Renaissance music leads into a more intensive study of music from the eighteenth century to the present, culminating in the discrimination of contrasting styles of music. For non-music majors only.

102: MUSIC APPRECIATION II. [3]
Prerequisite: Music 101 or permission of the instructor. A study of the development of the concerto, symphony, chamber music, suite, song, opera and other large vocal forms. This development will be traced through the stylistic periods of music. For non-music majors only.

113: SIGHT SINGING AND EAR TRAINING I. [2]
Prerequisite: Student must be able to read music and must have some proficiency on a musical instrument or in voice. The student will be taught to sing a line of music without the accompaniment of an instrument. Sol-fa syllables will be used. Matching tones, major and minor scales, key signatures, intervals, rhythm. Rhythmic and melodic dictation. Three hours per week.

114: SIGHT SINGING AND EAR TRAINING II. [2]

*The first 3 hours in this sequence (Music 335) may be applied toward the non-Western Proviso under General Requirements. Music 231 (Survey of World Music Literature) also meets the non-Western requirement.
COURSES OF INSTRUCTION

Prerequisite: Music 113 or permission of the instructor. Continuation of Sight Singing and Ear Training I. Alto and tenor clefs. Melodic and harmonic dictation. Three hours per week.

115: HARMONY I. [3]
Prerequisite: Student must be able to read music and must have some proficiency on a musical instrument or in voice. Music notation, scales, key signatures, intervals, chords, cadences, figured bass. Harmonizing soprano and bass lines in the eighteenth century chorale style.

116: HARMONY II. [3]
Prerequisite: Music 115 or permission of the instructor. First- and second-inversion chords, modulation, nonharmonic tones, figured bass, seventh chords. Analysis of Bach chorales; composition of four-part chorales in eighteenth century style.

171: CLASS PIANO I. [1]
The study of the piano keyboard as it is related to various clefs in music. Emphasis will be placed on the solution of basic problems of a stylistic and technical nature. For music majors only.

172: CLASS PIANO II. [1]
Prerequisite: Music 171 or permission of the instructor. The study of the piano keyboard as it is related to intermediate song and idiomatic piano literature. For music majors only.

MUSIC 173, 174, 273, 274: PRIVATE MUSIC INSTRUCTION. [1, 1, 1, 1]
Prerequisite: All students must pass an audition before registering for Private Music Instruction. Half-hour private lessons once a week in the following areas:

<table>
<thead>
<tr>
<th>Flute</th>
<th>Trombone</th>
<th>Percussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oboe</td>
<td>Baritone horn</td>
<td>Piano</td>
</tr>
<tr>
<td>Clarinet</td>
<td>Tuba</td>
<td>Organ</td>
</tr>
<tr>
<td>Bassoon</td>
<td>Violin</td>
<td>Harp</td>
</tr>
<tr>
<td>Saxophone</td>
<td>Viola</td>
<td>Classic guitar</td>
</tr>
<tr>
<td>French horn</td>
<td>Cello</td>
<td>Voice</td>
</tr>
<tr>
<td>Trumpet</td>
<td>String bass</td>
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</tbody>
</table>

Each student will be graded on his progress during the semester. One hour of practice per day is expected. The Private Music Instruction Fee applies (Page 23). Students who are registering for Private Music Instruction for the first time should register for Music 173 and then continue with the numerical sequence.

181, 182, 281, 282, 381, 382: UNIVERSITY CHORUS. [1, 1, 1, 1, 1, 1]
Open to all students in the University. Performance of works from the choral repertoire. Public concerts will be given. Three hours per week.
Regardless of class standing (freshman, sophomore, etc.), students who are registering for University Chorus for the first time should register for Music 181 and then continue with the numerical sequence.

183, 184, 283, 284, 383, 384: CONCERT BAND. [1, 1, 1, 1, 1, 1]
Open to all students in the University who possess a reasonable amount of performing ability. Public concerts will be given. Three hours per week. Regardless of class standing (freshman, sophomore, etc.), students who are registering for Concert Band for the first time should register for Music 183 and then continue with the numerical sequence.

203: FOLK AND TRADITIONAL MUSIC OF THE WORLD. [3]
A study of the musical structure and cultural setting of folk music among diverse peoples, with an introduction to the traditional art music of oriental countries. For non-music majors only.

204: INTRODUCTION TO TWENTIETH CENTURY MUSIC. [3]
Prerequisite: One course in music or permission of the instructor. A survey of the various styles found in twentieth century music. Tonal, atonal, serial and experimental music, as well as the representative schools of jazz will be studied. For non-music majors only.

215: HARMONY III. [3]
Prerequisite: Music 116 or permission of the instructor. A study of chromatic chords. Four-part chromatic writing and analysis of nineteenth century compositions.

216: HARMONY IV. [2]
Prerequisite: Music 215 or permission of the instructor. A continuation of the study of chromatic harmony as it applies to the classical forms.

218: KEYBOARD HARMONY. [1]
Prerequisite: Music 172 and 215. A study of techniques of harmonization at the piano keyboard. Two hours per week. For music majors only.

231: SURVEY OF WORLD MUSIC LITERATURE. [3]
Prerequisite: Music 115 or permission of the instructor. A survey of music literature in the four major theoretical systems of the world with an emphasis on the influences of non-Western systems on Western music.

335: HISTORICAL, THEORETICAL, AND ANALYTICAL STUDY OF MUSIC I. [3]
Prerequisite: Music 231 or permission of the instructor. A study of the development of music in Western civilization from the roots in ancient Hebrew, Greek, and Roman cultures through the Middle Ages with emphasis upon historical, theoretical, and analytical aspects.

336: HISTORICAL, THEORETICAL, AND ANALYTICAL STUDY OF MUSIC II. [3]
COURSES OF INSTRUCTION

**Prerequisite**: Music 231 or permission of the instructor. A study of the development of music in Western civilization from the early Renaissance through the early Baroque periods, with emphasis upon historical, theoretical, and analytical aspects.

391: **CONDUCTING I.** [2]
*Prerequisites: Music 172, 216 and 218 or permission of the instructor.* A study of basic techniques of conducting a musical ensemble. *Three hours per week.*

**PHILOSOPHY**

**REQUIREMENTS FOR THE MAJOR**

The major program in philosophy encourages students to develop a broad understanding of the basic areas of philosophic inquiry and provides opportunities for in-depth study in areas or topics of special interest. While course offerings are listed below in numerical sequence, they may be identified with the areas and topics by the second digit of the course numbers as follows:

-1-: Philosophy of Man  
-3-: History of Philosophy  
-5-: Theories of Value and Action  
-7-: Theories of Being and Knowledge  
-9-: Seminars and Independent Study

In addition to the general requirements for the Bachelor of Arts degree, philosophy majors must complete at least thirty additional semester-hours in philosophy including: History of Western Philosophy (both semesters), the Seminar in Philosophical Problems or the Seminar in Philosophical Figures, Independent Study, and six additional hours at the 300 or 400 level; at least three semester-hours must fall within each of the first four areas listed above.

**COURSES**

111: **MAN AND SOCIETY.** [3]
Reading and informal discussion of Plato’s *Republic* and the writings of several recent thinkers who deal with the problems of society, government, and the economy in their relation to human welfare in general.

151: **ETHICS.** [3]
A consideration of some classical theories of the good life. Reading and discussion of such writers as Plato, Aristotle, the Stoics and Epicureans, Kant, Mill.
171: THEORY OF KNOWLEDGE. [3]
Discussion of basic problems concerning the nature of knowledge, with special study of the relation of knowledge to perception, to belief, and to language.

173: LOGIC. [3]
A study of basic concepts and techniques of deduction, emphasizing the modern treatment of such topics as quantification and rules of inference, but with some study of the classical treatment as well. Also studied are basic principles of induction, the informal fallacies, and the uses of logic in everyday life.

213: PHILOSOPHY OF RELIGION. [3]
Prerequisite: Sophomore standing or higher, or consent of the instructor.
A study of classical appeals to philosophy in support of belief in God's existence (Philo, Augustine, Anselm, Aquinas, Descartes); the fideism of Hume and the metaphysical agnosticism of Kant; the concept of religious experience in the philosophies of Hegel, Schleiermacher, and Kierkegaard; the problem of religious language in contemporary empirical philosophy.

231, 232: HISTORY OF WESTERN PHILOSOPHY. [3, 3]
Prerequisite: Sophomore standing or higher, or consent of the instructor.
A survey of leading thinkers from early Greek philosophy to the twentieth century. First semester: the Pre-Socratics, Plato, Aristotle, Augustine, Aquinas, and others. Second semester: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Hegel, Bergson, Whitehead, the Pragmatists, and others.

252: MODERN ETHICS. [3]
Prerequisite: Sophomore standing or higher, or consent of the instructor.
An examination of major trends and issues in recent moral philosophy, especially those concerning the foundation of morals, the nature of ethical language, and the problem of freedom of the will.

271: METAPHYSICS. [3]
Prerequisite: Sophomore standing or higher, or consent of the instructor.
A study of some basic problems concerning being in general and the foundations of individual being; traditional treatments of such problems and criticism of the possibility of such knowledge. Selected readings from three or four leading figures such as Plato, Aristotle, Aquinas, Spinoza, Leibniz, Kant, Bradley, Heidegger, and others.

272: PHILOSOPHICAL METHODS. [3]
A consideration of the question, "What is philosophy?" by examining various philosophical methods. The course will have a twofold emphasis: (1) to study the internal relationship between a philosopher's method, doctrines and concept of philosophy, and (2) to examine the inter-relationship between philosophers, i.e., to indicate how philosophers'
COURSES OF INSTRUCTION

criticisms of each other have affected the philosophical enterprise per se. Philosophers studied include Plato, Aristotle, Hume, Kant, Ayer, and Heidegger.

331: PHILOSOPHY IN THE UNITED STATES. [3]
Prerequisite: Junior or senior standing and six hours in philosophy, or consent of the instructor. Selected studies of writers, movements, and topics from the full range of American philosophy. Readings from the works of such authors as Emerson, Thoreau, Peirce, James, Royce, Santayana, Dewey, Whitehead, Mead and others; consideration of the contributions of American writers to philosophical inquiry in such classical fields as metaphysics, ethics and epistemology, to more recent developments such as pragmatism, and generally to social and political philosophy, to logic and the philosophy of language, and to the philosophy of science.

332: RECENT AND CONTEMPORARY PHILOSOPHY. [3]
Prerequisite: Junior or senior standing and six hours in philosophy, or consent of the instructor. Selected studies of philosophical topics, movements or problems of current interest; e.g., phenomenology and existentialism, analytic philosophy, the philosophy of education, philosophical problems which bear upon the study of human behavior and interaction, philosophical interpretations of natural science and its impact on modern society.

334: LATIN AMERICAN THOUGHT. [3]
Prerequisite: Junior or senior standing and six hours in philosophy, or consent of the instructor. Historical sources and present range of Latin American thought. Metaphysical, ethical and aesthetic themes from colonial-period scholasticism to modern personal and national philosophies. Distinguished philosophers of recent times such as Kom and Romero (Argentina), Farias Brito (Brazil), Varona (Cuba), Caso and Vasconcelos (Mexico), Deustua (Peru), and Vaz Ferreira (Uruguay). The broad spectrum of contemporary thought touching religious, social and political topics.

Prerequisite: Junior or senior standing and six hours in philosophy, or consent of the instructor. An intensive examination of contemporary political thought from the perspective of ethical theory. The course will be offered in alternate semesters in the following sequence: democracy, communism, third world political thought and radical political thought. Need not be taken in sequence.

413: ALTERNATIVE FUTURES FOR SCIENCE AND SOCIETY. [3]
Prerequisite: Junior or senior standing and nine hours in philosophy, or consent of the instructor. Philosophical evaluations of human rationality and freedom as applied to the need for more humane roles and
institutional settings for science and technology in society. Examination of the views of leading contemporary thinkers on the modes, potential and limits of intellectual and political activity in such areas as international security, population, economic development, the environment, urban life, political institutions, religion, and the arts. Readings from such writers as Bronowski, de Jouvenel, Ellul, Marcuse, Mumford, Polanyi, Toulmin, Weizsaecker and others.

491, 492: PHILOSOPHICAL FIGURES. [3, 3]
Prerequisite: Junior or senior standing and nine hours in philosophy, or consent of the instructor. A close study of one or several writings of a leading philosopher. Texts to vary annually. Students who are registering for Philosophical Figures for the first time should register for Phil. 491; for the second time, Phil. 492.

493, 494: PHILOSOPHICAL PROBLEMS. [3, 3]
Prerequisite: Junior or senior standing and nine hours in philosophy, or consent of the instructor. A close study of some important problems (e.g., freedom of the will), with discussion of some leading traditional and modern writings on the subject. Topic to vary annually. Students who are registering for Philosophical Problems for the first time should register for Phil. 493; for the second time, Phil. 494.

495, 496: INDEPENDENT STUDY. [3, 3]
Prerequisite: Open only to philosophy majors with junior or senior standing and fifteen hours of philosophy. Individual study of some philosophical writer or movement. Student to produce at least one major piece of written work during the semester. Students who are registering for Independent Study for the first time should register for Phil. 495; for the second time, Phil. 496.

RELIGION COURSES

Courses are listed below in numerical sequence; areas of study may be identified by the second digit of the course numbers as follows:

-1-: History of Religions
-3-: Religion and Culture
-5-: Religious Literature
-7-: Religious Thought

211: RELIGIONS OF THE NEAR EAST. [3]

212: RELIGIONS OF THE ORIENT. [3]
COURSES OF INSTRUCTION


231: RELIGION IN AMERICA. [3]
A survey of the religious heritage in American culture, the growth of denominations and sects; the development of theology and ethics, the interrelationship of religion and the political-social-economic life, and consideration of the modern scene.

236: RELIGION AND MODERN MAN. [3]
The nature of man's religion, involving aspects of anthropology, sociology and psychology in religious thought and ethics; religious concepts and language in the context of a scientific and secular world.

237: RELIGIOUS DIMENSIONS OF CONTEMPORARY DRAMATIC LITERATURE. [3]
An examination of contemporary religious thinking through the study of selected modern plays of the Western stage, focusing on such themes as the self, human finitude, loneliness and alienation, love and redemption, personal guilt and social responsibility, suffering and death.

A survey of the development of the Old Testament and intertestamental literature, with attention given to the literary, historical, and theological aspects.

The Graeco-Roman World, Hellenistic and Palestinian Judaism, Dead Sea Scrolls, New Testament origins and teachings, the early Christian Community and its faith.

271: CONTEMPORARY ETHICAL ISSUES. [3]
An analysis and commentary on the ethic of responsibility and situational morality in relation to the moral questions of the day, including sexual morality, the preservation of life and definition of death, wealth and stewardship, warfare and deterrence.

332: AMERICAN RELIGION IN SOCIAL THOUGHT AND ACTION. [3]
Prerequisite: Rel. 231 or permission of the instructor. An in-depth study of the churches' involvement in social thought and action. Areas of analysis include: church, state, and freedom; the churches and the nation's wars; slavery, segregation, and racial problems; nineteenth century moral crusades; social sources of denominationalism and church unity; views of radical sects and cults; the economic order and the "social gospel"; social issues in modern America.

334: RELIGION IN THE THEATRE OF ASIA. [3]
Prerequisite: Religion 212, or consent of the instructor. A study of certain
Indian and Japanese theatre genres and their dramatic literature in their relation to the great religions of India and Japan.

376: CONTEMPORARY RELIGIOUS TRENDS. [3]
Prerequisite: Junior standing and six hours of religion or philosophy, or consent of the instructor. A study of contemporary religious thought, including secular theology, Ecumenical trends, Protestant-Catholic relations, theonetics (God in change), religious questions in the space age; an extensive review of selected works in a seminar-type class.
Department of Mathematics

Associate Professors Oppelt (Chairman), Cabell, Cole, Papp, Smith, Turner
Assistant Professors Chambers, Childress, Dorey, Kiley, Saperstone, Sennott

REQUIREMENTS FOR THE MAJOR

B.A. Program

In addition to general degree requirements the following courses are required: Mathematics 115, 116, 215, 216, plus eighteen more hours of which at least fifteen must be numbered above 300.

B.S. Program

In addition to general degree requirements the following courses are required: Mathematics 115, 116, 215, 216, 315, 316, 321, 322, plus eighteen more hours of which at least twelve must be numbered above 300.

The science requirement may be fulfilled by any one of the following four options:

Physics 113, 114, 213, 214, 215, 216;
Chemistry: four semesters excluding Chemistry 103 and 104;
Biology: four semesters excluding Biology 103 and 104;
Chemistry 101-102 and Biology 113-114.

The Department of Mathematics strongly recommends that a two-year proficiency in either French, German or Russian be demonstrated by each student pursuing a Bachelor of Science in Mathematics.

Mathematics 113, 114, 213, 214 are not recommended for mathematics majors. Mathematics 103, 104, 106, 261 and 371, 372 do not count toward satisfying the requirements of a major in mathematics. Students may not duplicate equivalent courses in the 113 and 115 sequence.

FOR NON-MAJORS

Designed for the students in the social and behavioral sciences are Mathematics 103, 104, and 261. We advise every liberal arts major to take either Mathematics 106 or the sequence 103, 104, and possibly 261. Students in the natural sciences who plan to do graduate work are advised to add to their basic calculus sequence from Mathematics 266, 313, 314, 351, 352, 443, 444, 446, 447.

COURSES

In exceptional cases the prerequisite for a course above the calculus sequence may be waived at the discretion of the instructor.
GEORGE MASON UNIVERSITY

103, 104: FINITE MATHEMATICS. [3-3]
Elementary set theory and probability, Matrix algebra, linear programming, Markov Chains and Game theory. Applications.

106: CONCEPTS OF MATHEMATICS. [3]
Important ideas in mathematics and their development.

Must be taken in sequence. Analytic geometry, functions, differentiation, integration, differential equations, applications.

Must be taken in sequence. Analytic geometry, functions, differentiation and integration in several dimensions, infinite series, differential equations.

200: FOUNDATIONS OF MATHEMATICS. [3]
Prerequisite: Mathematics 116. Real numbers, axiom systems, naive set theory, cardinal and ordinal numbers.

221: NUMBER THEORY. [3]
Prerequisite: Mathematics 116. Prime numbers, factorization, congruences, Diophantine equations.

232: GEOMETRY. [3]
Prerequisite: Six semester-hours in mathematics. Fundamental concepts of incidence. Axioms of Euclidean geometry and the resulting theory, axioms and development of non-Euclidean and projective geometry.

261: INTRODUCTION TO COMPUTERS. [2]
Prerequisite: Mathematics 103 or 106. An introduction to the use of a computer, discussion of the basic underlying concepts, the study of computer languages and social scientific applications of computing.

266: INTRODUCTION TO COMPUTER SCIENCE. [2]
Prerequisite: Mathematics 114 or 116. Study of a computer system and its logic. Flow charts. A study of various languages, basic programming and its application to various problems in mathematics and the physical sciences.

313, 314: INTRODUCTION TO APPLIED MATHEMATICS. [3, 3]
Prerequisite: Mathematics 214 or 216. Euclidean spaces, Fourier and orthogonal series, special functions, boundary-value problems, partial differential equations, special functions.

315, 316: ADVANCED CALCULUS. [3, 3]
Prerequisite: Mathematics 216. Elementary topology, limits, continuity, differentiation, integration, and series.
COURSES OF INSTRUCTION

321: ABSTRACT ALGEBRA. [3]
*Prerequisite: Mathematics 216. Theory of groups, rings, fields.

322: LINEAR ALGEBRA. [3]
*Prerequisite: Mathematics 321. Vector spaces, linear independence, bases, linear transformations, matrix algebra, inner product, special topics.

351: PROBABILITY. [3]
*Prerequisite: Mathematics 216. Random variables, probability functions, special distributions, limit theorems, Markov chains, stochastic processes.

352: STATISTICS. [3]
*Prerequisite: Mathematics 351. Estimation, decision theory, testing hypothesis, correlation, linear models and design.

382: INTRODUCTION TO STOCHASTIC PROCESSES. [3]
*Prerequisite: Mathematics 315 or Mathematics 313 and Mathematics 351. General notion of stochastic processes, finite and infinite Markov chains, discrete and continuous Markov processes, stationary processes, random walk problems, birth and death processes, waiting line and servicing problems, Brownian motion.

391, 392: READING AND PROBLEMS. [1-3, 1-3]
Enrollment restricted to mathematics majors. Independent study in mathematics.

411: FUNCTIONS OF A COMPLEX VARIABLE. [3]
*Prerequisite: Mathematics 316. The algebra and topology of complex numbers, functions, conformal mappings, contour integration.

431: TOPOLOGY. [3]
*Prerequisites: Mathematics 216 and six hours of mathematics at or above the 300 level. Metric spaces, topological spaces, compactness, connectedness.

443: APPLIED MATHEMATICS. [3]
*Prerequisite: Mathematics 316. Applied complex variables: Complex numbers, analytic functions, contour integration, residues, Fourier and Laplace transforms, the complex inversion integral, generalized functions, z-transforms.

444: APPLIED MATHEMATICS. [3]
*Prerequisite: Mathematics 316, 322, or permission of the instructor. Mathematical Programming: Linear programming and duality, games and minimax theorem, quadratic and convex programming, networks and graphs including max-flow min-cut theorem. Applications to resource allocation, inventory and transportation problems.
446, 447: NUMERICAL ANALYSIS AND DIGITAL COMPUTATION.
[3, 3]
Prerequisite: Mathematics 216. Numerical solutions of ordinary and partial differential equations, numerical differentiation and integration, significant figures, errors. Formulation of numerical problems for solution on digital computers.
Department of Physics

Professors Johnston (*Chairman*), Mielczarek
Associate Professor Papaconstantopoulos
Assistant Professors Black, Lankford, Lieb
Lecturers Clark, Flinn, Klein, Welanetz

REQUIREMENTS FOR THE MAJOR

In addition to the general degree requirements, the B.S. in Physics requires the completion of forty-four semester-hours in the major and twenty-three semester-hours in mathematics. The following physics courses are required for the B.S. degree: Physics 113, 114, 213, 214, 215, 216, 303, 305, 306, 402, 403, 405, 407. The remaining nine credits are to be elected from Physics 408, 410, 412, 414, 302, 207, with at least five semester credit hours from the first four courses. In addition to the two year calculus sequence the following mathematics courses are required for the B.S. degree: Mathematics 313, 314, plus one additional course in the 300 or 400 level. Mathematical Physics [Physics 412] may be substituted for the additional course in mathematics.

The student electing the Bachelor of Science program in Physics will be required to demonstrate a proficiency in computer programming by examination. This examination must be attempted before entering the senior year.

In addition to the general degree requirements, the B.A. in Physics requires the completion of thirty-one semester-hours in the major and seventeen semester-hours of mathematics. The following physics courses are required: Physics 113, 114, 213, 214, 215, 216, 303, 305, 306, 402 and either 407 or 302.

COURSES

101-102: INTRODUCTORY COLLEGE PHYSICS. [4-4]
A sound background of high school algebra, geometry and trigonometry is essential. A terminal course in physics intended to fulfill the natural science requirements of the College. The principles of mechanics, heat, electricity and magnetism, optics, atomic and nuclear physics. Three hours lecture, three hours laboratory or supervised work.

*113: GENERAL PHYSICS I. [2]
Corequisite: Mathematics 113. Mechanics. Two hours lecture, one hour recitation.

*The four-semester sequence, Physics 113, 114, 213, 214, 215, 216 is a calculus-based course in General Physics to be taken by physics, chemistry, engineering and those mathematics and science students who require a more intensive course than Physics 101 and 102.
114: GENERAL PHYSICS II. [2]
Prerequisite: Physics 113 and Mathematics 113. Corequisite: Mathematics 114. Mechanics, heat, properties of matter. Two hours lecture, one hour recitation.

201: SCIENCE AND TECHNOLOGY IN THE CONTEMPORARY ENVIRONMENT. [3] (Offered second semester only.)
No prerequisite: A survey of science and technology with emphasis on their interaction with our contemporary culture. This course will include qualitative familiarization with science beneath the earth, on the earth, in near space and in outer space as it relates to our civilization. Three hours lecture. A student who received credit for Physics 101-102 may not also receive credit for Physics 201.

207: THERMODYNAMICS. [3] (Same as Engineering 207)
Prerequisite: Physics 114 and Mathematics 114. Classical concepts of energy and temperature, basic definitions, first and second laws and their application to engineering systems, properties of pure substances, equations of state, analysis of thermodynamic processes. Three hours lecture.

213: GENERAL PHYSICS III. [3]

215: GENERAL PHYSICS III. (Laboratory) [2]
Prerequisite: Physics 114 or Physics 102. Experiments on mechanics and electricity. Emphasis is given on the use of the oscilloscope. Three laboratory hours.

214: GENERAL PHYSICS IV. [3]

216: GENERAL PHYSICS IV. (Laboratory) [2]
Prerequisite: Physics 114 or Physics 102. Experiments on optics and modern physics. Three laboratory hours.

302: ELECTRONICS. [4] (Same as Engineering 302)
Prerequisite: Physics 213, 215 or permission of the instructor. A lecture and laboratory course in electronics, design and operational characteristics of power supplies, amplifiers, oscillators, servomechanisms, and digital counting circuits. Six laboratory hours; two hours lecture.

303: CLASSICAL MECHANICS. [3]
Prerequisite: Physics 214, 216 and Mathematics 214. Motion of a
COURSES OF INSTRUCTION

particle in one, two and three dimensions; systems of particles; noninertial coordinate systems; equations of Lagrange and Hamilton. Three hours lecture.

305: ELECTROMAGNETIC THEORY. [3]

306: WAVE MOTION AND ELECTROMAGNETIC RADIATION. [3]
Prerequisite: Physics 305. Vibrating string, plane waves, interference, diffraction, polarization, electromagnetic waves, dispersion, relativity. Three hours lecture.

402, 403: AN INTRODUCTION TO QUANTUM MECHANICS AND ATOMIC PHYSICS. [3, 3]
Prerequisite: Physics 303, or permission of the instructor. Physics 402 is prerequisite to Physics 403. The experimental basis of quantum mechanics, the wave function, systems in one, two and three dimensions, perturbation theory, the variation principle, Hermitian operators and angular momentum, the theory of scattering. Three hours lecture.

405: STATISTICAL MECHANICS AND THERMODYNAMICS. [3]
Prerequisite: Physics 402. Statistical methods, systems of particles, thermodynamics, macroscopic parameters, the ideal gas, kinetic theory, quantum statistics, and transport processes. Three hours lecture.

407, 408: SENIOR LABORATORY IN MODERN PHYSICS. [3, 2]
Prerequisite: Senior status. Experiments in modern physics involving advanced techniques in electronics, optics, nuclear physics and solid state. Typical experiments: the Franck Hertz Experiment, Hall Effect, electron paramagnetic resonance, Mossbauer Effect. Physics 407, nine laboratory hours. Physics 408, six laboratory hours.

410: SOLID STATE PHYSICS. [3]
Prerequisite: Physics 402. Crystal structures, binding, lattice vibrations, the free electron model, metals, semiconductors, superconductivity, magnetism. Three hours lecture.

412: MATHEMATICAL PHYSICS. [3]

414: INTRODUCTORY NUCLEAR PHYSICS. [3]
Prerequisite: Physics 402. Alpha, Beta and Gamma emission and internal conversion; interactions of charged particles and Gamma rays with
matter; neutrons; nuclear models and reactions; elementary theory of nuclear forces; subnuclear particles. Three hours lecture.

ASTRONOMY COURSES

103: ASTRONOMY. [3]
No prerequisite: A descriptive introduction to the principles and topics of modern astronomy. The solar system, the galaxies, quasars, and the nature of space radiation are discussed. The contemporary theories of the origin of the universe including the pertinent ideas of the general theory of relativity are also considered. Three hours lecture.

ENGINEERING COURSES

(Two Years Only)

For a description of the Engineering Program, see Chapter V, Page 45.

101: INTRODUCTION TO ENGINEERING. [1]
Introduction to the technological problems encountered in the profession of engineering. Approaches and methods used in problem solving including computer techniques. One hour lecture.

102: ENGINEERING COMPUTATIONS. [1]
Basic concepts of design, analysis, synthesis and evaluation. Specific engineering design projects utilizing the computer. Two laboratory hours.

191: ENGINEERING GRAPHICS. [3]
Fundamentals of engineering drawing, descriptive geometry, graphical analysis and design. Specific topics include geometrical construction, multiview drawing, pictorial drawing, sectioning, dimensioning and assembly drawing. Two hours lecture, three hours laboratory.

192: INTRODUCTION TO MECHANICS. [3]
Resolution and composition of forces by analytical methods. Analysis of forces in structures and machine members. Centroids, equilibrium, friction, moments of inertia. Three hours lecture.

206: DYNAMICS. [3]

207: THERMODYNAMICS. [3] (Same as Physics 207)
Prerequisite: Mathematics 114 and Physics 114. Classical concepts of
energy and temperature, basic definitions, first and second laws and their application to engineering systems, properties of pure substances, equation of state, analysis of thermodynamic processes. *Three hours lecture.*

208: PROPERTIES OF MATERIALS. [3]
*Prerequisites:* Engineering 192, Physics 114. Concept of stress, strain, material structure, failure. Analysis of stresses in elastic and plastic solids. Application to flexure and torsion, deflections of beams and column, combined stresses. *Three hours lecture.*

285: ELECTRIC CIRCUITS. [3]
*Prerequisite:* Mathematics 114; *corequisite:* Physics 213. Circuit applications of Ohm, Coulomb, Ampere and Faraday Laws, Kirchhoff Laws, superposition, complex impedance, Phasor diagrams, equivalent circuits, power and energy relations. *Three hours lecture.*

302: ELECTRONICS. [4] (Same as Physics 302)
*Prerequisite:* Physics 213, 215 or permission of the instructor. A lecture and laboratory course in electronics, design and operational characteristics of power supplies, amplifiers, oscillators, servomechanisms, switching, timing and digital counting circuits. *Six laboratory hours; two hours lecture.*
Department of Social Sciences

Professor Early (Chairman)
Associate Professors Bloch, Khoury, Phillips
Assistant Professors Godbold, Nicholson, Solomon
Instructors Aruca, Gutowski, Holmes
Lecturers Andrews, Cassidy

ECONOMICS

REQUIREMENTS FOR THE MAJOR

B.A. Program

Students majoring in economics must satisfy the area requirements set for the Bachelor of Arts degree at George Mason University. In addition they must present thirty-three hours of work in economics, to include Economics 201 and 202. Six hours of statistics must be completed in addition to the thirty-three hours of economics mentioned above.

Credit hours in economics may be earned in excess of forty-two, but the surplus hours must be listed as elective hours on the degree application form.

B.S. Program

In addition to the general degree requirements, the B.S. with a major in Economics requires 39 hours of credit in economics to include Economics 201, 202 and 412. In addition to the 39 hours of credit in economics, students must also complete Business Administration 101 and 261-262; Mathematics 113, 114, and 261 or 266; and a two-semester sequence in a laboratory science.

Students who contemplate graduate study in economics are advised to complete at least one course in calculus beyond Mathematics 114.

COURSES

100: THE ECONOMICS OF PUBLIC ISSUES. [3]
This course does not fulfill any requirements for a degree in economics. Economics for non-majors. An introduction to economics in the context of contemporary issues. Typical subjects include: the economics of crime prevention, public education, abortion repeal, prostitution, negative income taxes, unemployment, inflation, and pollution abatement.
101: PRINCIPLES OF ECONOMICS. [3]
An introductory course emphasizing macroeconomic analysis. Topics considered include national income analysis, money and banking, economic growth and stability, unemployment, inflation, and the role of government in the economy.

102: PRINCIPLES OF ECONOMICS. [3]
A course emphasizing introductory microeconomic analysis. Basic economic concepts and theories of production, value, price, and economics of the firm, and functional distribution are considered and applied under varying conditions of the market.

201: INTERMEDIATE MACROECONOMICS. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. The study of aggregate economic accounts, including the measurement of national income, determinants of levels of income and output, and causes and solutions for problems of unemployment, inflation, and economic growth.

202: INTERMEDIATE PRICE THEORY. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An examination of basic factors of price and distribution theory, including analysis of demand, costs of production, and supply relationships, and price and output determination under various market structures.

300: LABOR PROBLEMS. [3]
Prerequisite: Economics 101 and 102 or permission of the instructor. A study of the operation of American labor unions and of their effect upon our society. Causes of and proposed solutions to selected problems will be considered.

301: MONEY AND BANKING. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An examination of monetary and of commercial and central banking systems in the economic system with particular emphasis upon their relationship with American governmental programs, fiscal policies, and controls.

302: PUBLIC FINANCE. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An examination of intergovernmental financial relationships, types, incidences and consequences of taxation, other sources of governmental income, governmental expenditures and their effects, public economic enterprises, public borrowing, debt management and its economic effects.

303: ECONOMIC GROWTH AND BUSINESS CYCLES. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. Prior completion of Economics 201 and 202 is recommended. An
examination of the factors contributing to sustained economic growth with additional emphasis on business fluctuations and their measurement.

304: ECONOMICS OF INDUSTRIAL ORGANIZATION. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An analysis of economic factors influencing industrial structure and of the conduct and performance of industry associated with different market structures.

305: REGIONAL ECONOMICS. [3]
Prerequisite: Economics 202 or permission of instructor. Discusses the economics of urban structure, regional development, industrial location, land utilization, and other locational factors affecting spatial preferences and patterns.

307: ECONOMICS OF DEVELOPING AREAS. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An analysis of major aspects of economic growth characteristic of developing countries. Recent theories of economic development; obstacles to development; policies and planning for development.

308: ECONOMIC DEVELOPMENT OF LATIN AMERICA. [3]
Prerequisite: Economics 101 or permission of instructor. An examination of the economic development, institutions and problems of Latin America.

401: COMPARATIVE ECONOMIC SYSTEMS. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An examination of the theory, programs, and practices of selected major contemporary economic systems, to include capitalism, socialism, communism, and fascism. Special attention is given to the role of planning in the western European countries.

403: DEVELOPMENT OF ECONOMIC THOUGHT. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. An examination of the main developments in economic thought from 1500 to the present with emphasis upon their historical origins, their impact on contemporary economics, and their theoretical validity.

404: INTERNATIONAL ECONOMICS. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. Government 132 is desirable. A survey of contemporary international economic relations with emphasis on the foreign economic policies of the United States, the balance of payments, international investments, foreign exchange, and international economic disequilibrium and adjustment.

406: ECONOMIC PROBLEMS AND PUBLIC POLICIES. [3]
COURSES OF INSTRUCTION

Prerequisite: Economics 101 and 102 or permission of instructor. A detailed study of important economic problems in light of current and proposed public policies.

412: QUANTITATIVE ECONOMIC ANALYSIS. [3]
Prerequisite: Economics 201, 202, Business Administration 261-262. An examination of modern statistical techniques in estimating economic relations.

420: ECONOMICS OF LABOR. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. A course analyzing economic factors that determine levels of wages and employment and their economic consequences. Attention is directed to recent developments in unionism, collective bargaining, and industrial technology.

430: SEMINAR IN ECONOMICS. [3]
Prerequisite: Economics 201, 202 and permission of instructor. A course in which the more important current economic problems will be studied and discussed in seminar form.

GEOGRAPHY COURSES

101: MAJOR WORLD REGIONS. [3]
A geographic analysis of the patterns, problems, and prospects of the world's principal human-geographic regions, including Anglo-America, Europe, Far East, Latin America, and the Soviet Union. Emphasis is upon the causal factors of areal differentiation and the role geographic differences play in the interpretation of the current world scene.

102: PHYSICAL GEOGRAPHY. [3]
Distribution of the world's landform features, climates, vegetation types, soils, and mineral resources; their characteristics, causes, and significance. Interrelationships of the natural environment. Properties of the globe and its representation in the form of maps treated in detail.

103: CULTURAL GEOGRAPHY. [3]
A study of relationships between geography and human population dispersion, cultural patterns, and economic development.

201: GEOGRAPHY OF LATIN AMERICA. [3]
Prerequisite: Geography 102 is desirable but not required as a prerequisite. A regional survey of physical resources, population, cultural characteristics, and economic activities in Latin America.

206: CLIMATOLOGY. [3]
World distribution of climatic elements; methods of arranging climatic data; climatic classifications and world distributions of climatic types; general climatic circulation, changes, and fluctuations.
GEORGE MASON UNIVERSITY

GOVERNMENT AND POLITICS

REQUIREMENTS FOR THE MAJOR

To be eligible to graduate in June or August, 1972, with a B.A. in Government and Politics a student must be able to satisfy all requirements for that degree prescribed by George Mason University. In addition, he must present at least thirty semester credit hours of work in his major subject, including at least two courses described below which carry five semester credit hours each.

To be eligible to graduate after August, 1972, with a B.A. in Government and Politics a student must be able to satisfy all requirements prescribed for that degree by George Mason University. A student who presents 0-8 hours of lower division credit must successfully complete six upper division courses in government and politics; one who presents 9-14 hours of lower division credit must successfully complete five upper division courses in government and politics; one who presents 15-18 hours of lower division courses in government and politics must successfully complete four upper division courses.

However, a student who transfers to George Mason University must earn at this campus at least twelve hours in his major subject by completing courses at the upper division level. Each transfer student, therefore, must successfully complete three upper division courses in government and politics.

COURSES

103: INTRODUCTION TO DEMOCRATIC GOVERNMENT. [3]
An analysis and comparison of the American presidential and the British parliamentary forms of democratic governments. (Students who have taken Government 101: NATIONAL GOVERNMENT OF THE UNITED STATES are not eligible to take this course.)

132: INTRODUCTION TO INTERNATIONAL POLITICS. [3]
An examination of geographic, demographic, economic, ideological, and other factors which influence foreign policies of states; the methods of conflict and institutions of adjustment extant among states; the limitations and functions of power, diplomacy, and international law and organization.

204: AMERICAN STATE AND LOCAL GOVERNMENT. [3]
An introduction to the nature, organization, functions and problems of American state and local governments in their challenging and rapidly changing environment.

241: INTRODUCTION TO PUBLIC ADMINISTRATION. [3]
Prerequisite: Government 103 or permission of instructor. An examination of administrative structure and processes. Includes
organization theory, administrative behavior, personnel, decision-making, communications, leadership, management, budgetary processes, and administrative responsibility.

Prerequisite: Junior or senior standing. An introduction to general jurisprudence, Islamic and Soviet legal systems; analysis of selected aspects of judicial organization and operation, of the role of the judiciary in policy formation, and of selected constitutional principles evolved by the United States Supreme Court.

310: POLITICAL DYNAMICS. [5]
Prerequisite: Junior or senior standing. An introduction to operating factors in political systems: Includes survey of political parties, public opinion, and pressure groups; attitude formation and expression; political participation; voting behavior; minority group politics; political communication.

330: POLITICAL VALUES. [5]
Prerequisite: Junior or senior standing. An examination of political values concerning the nature of man, the origin and nature of the state, bases of political obligation, problems of consent, concepts of power, and sources of authority as presented in the works of major writers.

341: ADMINISTRATIVE MANAGEMENT AND BEHAVIOR. [5]
Prerequisite: Government 241, junior or senior standing, or permission of instructor. An examination and study of American governmental administration. Particular attention will be paid to organizational theory and behavior, administrative responsibility, management systems, roles of the bureaucracy, and relationships between the individual and the organization.

Prerequisite: Junior or senior standing. Theories of international relations; organization; law; pacific settlement of disputes; crisis and conflict resolution.

Prerequisite: Junior or senior standing. An examination of the government, politics, and problems of metropolitan centers and surrounding areas.

425: PUBLIC POLICY MAKING. [5]
Prerequisite: Junior or senior standing. An inquiry into practices and processes involved in public policy making: roles of executives, legislatures, courts, interest groups, public agencies, political parties, and public relations in policy making. Case studies on politics of policy making.
450: CROSS-NATIONAL POLITICAL STUDY. [5]
Prerequisite: Junior or senior standing. A study and analysis of political and governmental institutions, values, conditioning factors, behavior patterns, decisional processes, courses and styles of political change, and problems of nation-building based upon an integrative rather than upon a country-by-country approach.

480: INTERNSHIP. [2-5]
Open to authorized senior majors only. Contact department prior to enrollment. Internships are approved work-study programs established by the department with specific employers. Credit will be fixed to suit each individual situation as determined by the department.

SOCIAL SCIENCE COURSE

491: INTERDISCIPLINARY SEMINAR: CONTEMPORARY LATIN AMERICA. [3]
Prerequisite: Open only to senior majors in the Latin American program. A study of the interrelation of economic, political and social factors in explaining current Latin American reality.
**Interdisciplinary Programs**

**LATIN AMERICAN STUDIES**

*Latin American Studies Committee*

Dr. Frank MacD. Spindler, *Chairman*
Mr. Francisco G. Aruca
Mrs. Dorothy I. MacConkey
Mr. Michael J. McDermott

**REQUIREMENTS FOR THE MAJOR**

This interdisciplinary program culminates in the conferral of the degree of Bachelor of Arts with a major in Latin American Studies and requires a minimum of 120 semester-hours of course work.* Participants must satisfy the area requirements for the Bachelor of Arts degree at George Mason University. In addition, they must present thirty-six semester-hours of course work in Latin American Studies divided to include (a) eighteen semester-hours, upper division courses (300-400 level), in a core discipline, and (b) eighteen semester-hours of Latin American oriented courses, including the interdisciplinary seminar on Contemporary Latin America (Social Sciences 491), designed to give a cultural dimension to the student's program. Proficiency in Spanish or Portuguese must be demonstrated either by examination or by completion of the requisite 251 foreign language courses. A comprehensive examination, to be administered at the end of the senior year, must be satisfactorily passed.

**COURSES OF INSTRUCTION INCORPORATED IN THIS PROGRAM**

*Department of Behavioral Sciences:*

Sociology 101: Introductory Sociology. [3]

Sociology 232: Sociology of Urban Communities. [3]

Sociology 308: Sociology of Race Relations and Minorities. [3]

Sociology 401: Social Stratification. [3]

*Department of Biology*

Biology 271: Characteristic Animals of the Americas. [3]

*Inquiries concerning this program should be directed to Dr. Frank MacD. Spindler, Chairman, Latin American Studies Committee, George Mason University, Fairfax, Virginia, 22030.*
Department of Foreign Languages:

- **French 151-152**: Elementary French. [4-4]
- **French 251**: Intermediate French. [4]
- **Portuguese 151-152**: Elementary Portuguese. [4-4]
- **Portuguese 251**: Intermediate Portuguese. [4]
- **Spanish 151-152**: Elementary Spanish. [4-4]
- **Spanish 153**: Review, Elementary Spanish. [4]
- **Spanish 251**: Intermediate Spanish. [4]
- **Spanish 252**: Spanish Conversation and Composition. [3]
- **Spanish 253**: Commercial Spanish. [3]
- **Spanish 254**: Spanish Civilization. [3]
- **Spanish 255**: Latin American Civilization. [3]
- **Spanish 256**: Readings in Spanish Literature. [3]
- **Spanish 257**: Readings in Latin American Literature. [3]
- **Spanish 300**: Spanish Civilization and Culture. [3]
- **Spanish 303, 304**: Advanced Conversation and Composition. [3, 3]
- **Spanish 305, 306**: Survey of Spanish Literature. [3, 3]
- **Spanish 307, 308**: Latin-American Literature. [3, 3]
- **Spanish 309, 310**: Literature of the Golden Age. [3, 3]
- **Spanish 313, 314**: Spanish Literature of the Nineteenth Century. [3, 3]
- **Spanish 320**: Linguistics of the Spanish Language. [3]
- **Spanish 403, 404**: Contemporary Spanish Literature. [3, 3]
- **Spanish 410**: Cervantes. [3]
COURSES OF INSTRUCTION

Department of History:

History 101, 102: History of Western Civilization. [3, 3]

History 121: Formation of the American Republic. [3]

History 122: Development of Modern America. [3]

History 343, 344: Diplomatic History of the United States. [3, 3]


History 362: Latin American History: The Modern Era. [3]

History 363: The History of Argentina, Brazil, and Chile. [3]

History 370: The Diplomatic History of Latin America. [3]

History 438: The Spanish Borderlands. [3]

History 443: History of Spain and Portugal. [3]

History 453: History of Mexico. [3]

History 491, 492: Senior Seminar in History. [3, 3]

History 493, 494: Directed Readings in History. [3, 3]

History 497: American Historiography. [3]

Department of Humanities:

Art 101: Art Appreciation. [3]

Music 101: Music Appreciation. [3]


Philosophy 111: Man and Society. [3]

Philosophy 151: Ethics. [3]

Philosophy 171: Theory of Knowledge. [3]

Philosophy 213: Philosophy of Religion. [3]

Philosophy 231, 232: History of Philosophy. [3, 3]

Philosophy 334: Latin American Thought. [3]
GEORGE MASON UNIVERSITY

Department of Social Sciences:
Economics 101, 102: Principles of Economics. [3, 3]
Economics 305: Regional Economics. [3]
Economics 307: Economics of Developing Areas. [3]
Economics 308: Economic Development of Latin America. [3]
Economics 403: Development of Economic Thought. [3]
Economics 404: International Economics. [3]
Geography 101: Major World Regions. [3]
Geography 201: Geography of Latin America. [3]
Government 132: Introduction to International Politics. [3]
Government 231: Foreign Policies of the Powers. [3]
Government 450: Cross-National Political Study. [5]
Social Sciences 491: Interdisciplinary Seminar: Contemporary Latin America. [3]

LAW ENFORCEMENT

Law Enforcement Committee
Dr. Stephen T. Early, Jr., Chairman
Dr. Nehemiah Jordan
Captain Clyde E. Embrey (Northern Virginia Police Academy)
Dr. Edgar J. Fredericks (Northern Virginia Community College)

REQUIREMENTS FOR THE MAJOR

This interinstitutional and interdisciplinary program culminates in the conferral of the Bachelor of Science with a major in Law Enforcement and requires a minimum of 128 hours of course work.* Participants should familiarize themselves fully with the requirements for

*Inquiries concerning this program should be directed to Dr. Stephen T. Early, Jr., Chairman, Law Enforcement Program Committee, George Mason University, Fairfax, Virginia, 22030.
this degree and with the academic regulations of George Mason University. The program is designed principally for students who have completed their professional training courses at Northern Virginia Community College and who desire to earn a baccalaureate degree. However, under appropriate circumstances it may be open to other students as well. *George Mason University offers no professional training courses in police science, police administration, or similar fields.* Such work must be taken in an accredited program at another institution and transferred to George Mason University. The transfer of courses and credits to this program will be determined on an individual basis.

The quantitative and distributional requirements which must be fulfilled by candidates for the Bachelor of Science with a major in Law Enforcement are summarized below. *Freshman English or an equivalent course in the specified amount must be completed prior to entry into the program at George Mason University.* Except for the specified hours of professional training and freshman English, all requirements may be completed at George Mason University.

Minimum Quantitative and Distributional Requirements by Subject

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. General</td>
<td></td>
</tr>
<tr>
<td>a. English Composition</td>
<td>6</td>
</tr>
<tr>
<td>b. Literature – British or American</td>
<td>6</td>
</tr>
<tr>
<td>c. Art, music and/or philosophy (excluding applied music and studio art courses)</td>
<td>6</td>
</tr>
<tr>
<td>d. American History or Principles of Economics</td>
<td>6</td>
</tr>
<tr>
<td>e. A two-semester sequence in one science with a laboratory</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
<tr>
<td>II. Major requirements</td>
<td></td>
</tr>
<tr>
<td>a. Police science</td>
<td>22-33</td>
</tr>
<tr>
<td>A student whose objective is to prepare himself to enter correctional work may make appropriate substitutions for courses in law enforcement. However, professional guidance should be the basis for such substitutions and must be sought prior to entering George Mason University.</td>
<td></td>
</tr>
<tr>
<td>b. Directly related</td>
<td></td>
</tr>
<tr>
<td>1. Government</td>
<td>16</td>
</tr>
<tr>
<td>To consist of separate courses in national and in state and local government and, at George</td>
<td></td>
</tr>
</tbody>
</table>

125

http://catalog.gmu.edu
GEORGE MASON UNIVERSITY

Mason University, two courses from among those designated Govt. 301, 330, 415, and 425.

2. Psychology ........................................ 12
   To consist of the introductory courses in general and courses in social and abnormal psychology.

3. Sociology ........................................... 16
   To consist of courses in the introductory sequence and of a course each in delinquency, criminology, urban communities, and race relations and minorities.

c. Electives ........................................... 28-17

Total 128

It is suggested that introductory courses in psychology and sociology be taken prior to entry at George Mason University but that other courses in these subjects be taken after transfer. Any course begun in a quarter system should be completed in that system.

The total hours required by this program is 128. Of that number, one-fourth must be earned at George Mason University and at least twelve hours of that one-fourth must be in courses designated by numbers in the 300 and 400 series.

It is the responsibility of every prospective student to familiarize himself with the academic regulations of George Mason University and to identify and abide by the rules and procedures which are applicable to himself.
College of Professional Studies

Department of Business Administration

Associate Professor Tongren (Chairman)
Assistant Professors Gibbons, Sampson, Sood
Acting Assistant Professors Seely, Marchione
Instructor Czarsty
Lecturers Dominick, Goldberg

A student at George Mason University may earn a Bachelor of Science degree with a major in Business Administration. Students who entered the University in September, 1971, or earlier, may elect to earn the Bachelor of Arts degree with a major in Business Administration.

REQUIREMENTS FOR THE MAJOR

Bachelor of Arts Degree: Requirements for the Bachelor of Arts degree with a major in Business Administration will be found in the College catalog for 1971-72. This degree program is not offered for students entering after September, 1971.

Bachelor of Science degree: The major program in business administration offered by George Mason University culminates in a Bachelor of Science degree and requires a minimum of 122 hours of course work. Students who have previously enrolled in another degree program in business administration must be enrolled in this degree program for at least one semester and earn at least three semester hours of credit in order to receive the degree of Bachelor of Science with a major in Business Administration.

Specific requirements for the degree of Bachelor of Science with a major in Business Administration are as follows:

Business Core Courses:
The following Business core requirements meet the standard set by the American Association of Collegiate Schools of Business:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>6</td>
</tr>
<tr>
<td>*Business Law</td>
<td>6</td>
</tr>
<tr>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>*Organization, Management, and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL BUSINESS CORE 39 hours

*These courses must be taken at George Mason University.
GEORGE MASON UNIVERSITY

Business Elective Courses:
In addition, students must take twelve additional semester-hours in the major field. Of those, six semester-hours must be in either accounting, management, personnel administration, data processing, or finance.

TOTAL BUSINESS ELECTIVES ..............12 hours

GRAND TOTAL, ALL BUSINESS ADMINISTRATION HOURS ....51

General Education and Open Electives: See DEGREE REQUIREMENTS in ACADEMIC PROGRAMS section of the Catalog.

COURSES

101: ELEMENTARY ACCOUNTING. [3]
An overview of the accounting cycle with emphasis on preparation of financial statements and on accounting for sales, purchases, cash transactions, and internal control.

102: ELEMENTARY ACCOUNTING. [3]
Prerequisite: Business Administration 101 or permission of instructor.
An examination of the accounting principles and methods applicable to partnerships and corporations engaged in trading and manufacturing and of the sources of capital available to them.

212: INTRODUCTION TO DATA PROCESSING. [3]
A review of the types of systems and hardware in general use by business organizations, including mechanical and electronic processors.

232: BUSINESS COMMUNICATION. [3]
An introduction to the forms, practices, and problems of effective business communications. Includes inquiry into the sources and uses of business information; techniques for analyzing and evaluating data; for conducting interviews and conferences; and for developing and using creative abilities of employees. Emphasis is placed on written exercises.

234: PRINCIPLES OF MANAGEMENT. [3]
The fundamentals of management; particular emphasis on the theories of management; evolution of management thought; managerial functions of planning, organizing, directing and controlling organizational activity. Practical application of theory to actual business situations.

261, 262: STATISTICAL ANALYSES AND TECHNIQUES. [3, 3]
Prerequisite: Statistical Analyses and Techniques 261 is a prerequisite for 262. A non-mathematical course designed for students in diverse fields of study, emphasizing the making of statistical inferences, determining confidence intervals and testing statistical hypotheses for large and small samples: applications of the binomial, normal, student's
COURSES OF INSTRUCTION

t, chi square, and F distributions; correlation, variance and trend analysis; and the more common non-parametric tests.

301: COST ACCOUNTING. [3]
Prerequisite: Business Administration 101, 102 or permission of instructor. Cost accounting provides data for three major purposes: (1) planning and controlling routine operations, (2) nonroutine decisions, policymaking and long-range planning, and (3) inventory valuation and income determination.

302: QUANTITATIVE FACTORS IN BUSINESS. [3]
Prerequisite: Business Administration 261-262 or permission of instructor. An introduction to the use of quantitative methods for solving business problems. Limited mathematical adaptations of statistical methods and the development of simple models are involved.

307: INTRODUCTION TO INTERNATIONAL BUSINESS. [3]
A general overview of foreign trade from the viewpoint of business management. The historical dimension of international business; physical movement of goods; conditions essential for successful trading; the role of government in international trade; how international business policies are developed.

309: LABOR-MANAGEMENT RELATIONS. [3]
An examination of American trade unions and of unionism. The labor contract; the bargaining processes; the philosophy of unionism; the use of bargaining techniques for non-wage issues; the legal context of labor-management relations; the responsibilities and duties of unions and management; the political-economic impact of unionism.

311: PRINCIPLES OF MARKETING. [3]
An examination of the marketing structure and of business and economic activities involved in marketing goods. Attention is given to surveys, to distribution channels, to functions, costs and alternative policies, to social and economic consequences, and to governmental supervision and control of the marketing of consumer and industrial goods.

312: DIGITAL COMPUTER CONCEPTS. [3]
Prerequisite: Business Administration 212 or permission of instructor. The organizational structure of computer installations; management information systems; quality control, recovery and multi-processing scheduling techniques; evaluating and installing proposed computer systems.

332: PERSONNEL ADMINISTRATION. [3]
An examination of the principles and procedures related to the recruitment and selection of a labor force, grievance and disciplinary procedures, problems involved in collective bargaining, pay policies,
merit rating, promotion, training, etc., with emphasis upon their relationship to management.

341: INTRODUCTION TO BUSINESS FINANCE. [3]
Prerequisite: Economics 101, 102 and Business Administration 101 and 102 or permission of instructor. A survey of business finance with attention directed to financial problems of business firms, large and small, and to methods for solving them.

342: FEDERAL TAXATION. [3]
Prerequisite: Business Administration 101 and 102 or permission of instructor. An examination of the federal tax structure, including the economic structure of taxation, the Internal Revenue Code and the impact of judicial decisions.

346: PRINCIPLES OF INVESTMENTS. [3]
Prerequisite: Business Administration 102 and Business Administration 341 or permission of the instructor. An introduction to considerations of personal and business investments with emphasis upon tests of a good investment, sources of information, types of investments, and mechanics of purchase and sale.

351: GOVERNMENT AND BUSINESS. [3]
Prerequisite: Economics 101 and 102 or permission of instructor. A consideration of public policies intended to resolve or mitigate problems caused by industrial and other combinations, by public utility industries, by government enterprises, and by labor-management relations.

362: PRINCIPLES OF TRANSPORTATION. [3]
A course in the basic elements of transportation related to business applications, including modes, methods, rates and regulation.

370: INTERMEDIATE ACCOUNTING. [3]
Prerequisite: Business Administration 101 and 102. A detailed analysis of problems and the related theory concerning accounts normally found in financial statements. Preparation of supplementary and special reports for purposes of managerial control.

371: ADVANCED ACCOUNTING. [3]
Prerequisite: Business Administration 101, 102 and 370, or permission of instructor. Advanced accounting theory applied to specialized problems in partnerships, ventures, consignments, installment sales, statements of affairs, receiver's accounts, realization and liquidation, reports and consolidation of parent and subsidiary accounts and fund accounting.

401: AUDITING. [3]
Prerequisite: Business Administration 370 or permission of instructor. Audit objectives, reports and procedures are presented as part of the
independent public accountant's review along with newer tools of statistical sampling and EDP. Professional ethics and legal liabilities are examined as part of the framework within which the CPA works.

412: MARKETING MANAGEMENT. [3]
Prerequisite: Business Administration 311 or permission of instructor. The managerial aspects of marketing emphasizing the development of marketing strategies and plans and integrating the specific elements of the marketing process.

421, 422: BUSINESS LAW. [3, 3]
Prerequisite: Senior class standing. A survey of the more important general principles of law which apply to the daily activities of business operations: discussion of concepts and principles relating to the law of contracts, bailments, agency, sales, negotiable instruments, partnerships, bankruptcy, and other topics. This course utilizes the principles of marketing and finance as presented in Business Administration 311 and 341.

431: THE SOCIAL ENVIRONMENT OF AMERICAN BUSINESS. [3]
Prerequisite: Senior class standing or permission of instructor. An introduction to the social position and responsibilities of American business and to the place of ethics and standards in its conduct.

433: FINANCIAL MANAGEMENT. [3]
Prerequisites: Economics 101, 102, Business Administration 101-102, and 341 or permission of the instructor. Completion of Business Administration 342 is recommended but not required. Functions and objectives of financial management; problems of internal financial analysis; management and control of current assets, capital budgeting, short and intermediate term financing; forecasting and planning the capital structure of the firm; leasing; dividend policy; valuation of the form. Extensive use of business cases.

434: BUSINESS ORGANIZATION, MANAGEMENT AND POLICY. [3]
Prerequisite: Senior class standing. A senior-level course designed to acquaint the student with the structure and management of various types of organizations. The principles of planning, organizing, directing, staffing and controlling are related, through case studies, to actual business situations. The cases will include material from other required subjects in the business curriculum, and will stress techniques of managerial decision-making in both large and small enterprises.
Department of Education

Professors Snyder (Chairman), Eaves, Joy, Schindler
Associate Professors Aebischer, Azarowicz, Bindel, Gilstrap, Martin, Smith, Spuhler, Trowbridge
Assistant Professors Austin, Carroll, Grant, Linn, Moretz, Richardson, Schuchman, Shelton
Instructor Bloecker
Lecturers Bouey-Yates, Bowen, Ellert, Evans, Major, Stodghill

Requirements for Prospective Teachers

The Teacher Education Program is designed to develop teachers who are qualified academically and professionally, and who possess the personal attributes needed for success in the teaching profession.

The Teacher Education Program serves the following categories of students:

Undergraduate students who are working toward the Bachelor of Science Degree in Education and the Virginia Collegiate Professional Certificate with endorsement at the elementary school level.

Undergraduate students who are working toward the Bachelor of Arts or Bachelor of Science Degree and the Virginia Collegiate Professional Certificate with endorsement at the secondary school level.

Students who have earned Baccalaureate degrees and who are working toward the Virginia Collegiate Professional Certificate with endorsement at the elementary or secondary school level.

Students who have earned Baccalaureate degrees and who are working toward the Master of Education Degree and the Collegiate Professional Certificate with endorsement at the elementary or secondary level. (See the Graduate Catalog for detailed information.)

Admission to the Teacher Education Program

Admission to the Teacher Education Program is on a selective basis. Undergraduates and students holding baccalaureate degrees must be admitted to the program prior to enrollment in 400-level Education courses. Formal application for admission to the Teacher Education Program must be made by November 1 or March 15 of the semester preceding that in which the student intends to enroll in 400-level Education courses.

Admission to the Teacher Education Program is granted by the Teacher Education Committee. To be considered for admission to the Teacher Education Program, undergraduate students must have a 2.300 grade point average in all courses attempted at George Mason University.
Students holding baccalaureate degrees must have an average of 2.300 in all course work attempted in earning their degree.

In granting admission to the Teacher Education Program, the Teacher Education Committee will give consideration to emotional balance, personality, leadership ability, ability in oral and written expression, moral character, and freedom from disqualifying physical and health conditions. Virginia "Certification Regulations for Teachers," stipulate in part as follows:

I. Applicant must be a citizen of the United States, must be at least eighteen years of age, and must possess good moral character.

II. Applicant must have good health and no disqualifying physical or emotional handicaps. Evidence of fitness to teach from the standpoint of health may be required from a qualified physician.

A review of qualifications needed to be a teacher is conducted throughout the program. In addition, the academic record and other qualifications of each student are reviewed prior to approval for student teaching. For approval for student teaching, an overall grade point average of 2.300 is required. For students holding baccalaureate degrees, the grade point average for student teaching is computed on all course work attempted in earning the baccalaureate degree, plus all course work attempted at George Mason University. A minimal grade of "C" in Student Teaching is required to secure the recommendation of the University for certification.

Students holding baccalaureate degrees who are working toward the Virginia Collegiate Professional Certificate will be required to meet the subject matter requirements specified by Virginia "Certification Regulations for Teachers." The professional requirements are those prescribed for undergraduate students. Students in this category must agree to complete the entire sequence of Education courses, including student teaching.

TEACHING IN THE SECONDARY SCHOOLS

The program for teaching in secondary schools, usually grades 7 through 12, is offered in the College of Arts and Sciences and requires completion of a program of 131 semester-hours.* Completion of this program and the program for the Bachelor of Arts Degree will usually require attendance at one or more summer sessions. One semester of the senior year will normally be devoted to a professional semester during which the student will complete Education 416, 421 and 435.

The following constitutes the program for the Virginia Collegiate Professional Certificate with endorsement at the secondary level. The courses marked with an asterisk are not credited toward the 120

*For students enrolled in a Bachelor of Arts program who enter in September, 1971 and after.
GEORGE MASON UNIVERSITY

semester-hours required for the Bachelor of Arts Degree. It is imperative that an Arts and Sciences major pursuing the course work for the Virginia Collegiate Professional Certificate be aware of the following specific State requirements:

General Requirements:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 101, 102</td>
<td></td>
</tr>
<tr>
<td>English, Foreign Language, Speech, Fine Arts,</td>
<td></td>
</tr>
<tr>
<td>Music, or Philosophy</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>12</td>
</tr>
<tr>
<td>History 121 or 122</td>
<td></td>
</tr>
<tr>
<td>Anthropology, Economics, Fine Arts, Geography,</td>
<td></td>
</tr>
<tr>
<td>History, Political Science, Psychology, or Sociology</td>
<td></td>
</tr>
<tr>
<td>Laboratory Science and Mathematics</td>
<td>12</td>
</tr>
<tr>
<td>(At least one course in each area.)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td>(From the areas listed above.)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>21</td>
</tr>
<tr>
<td>Education 301, 319, 416, 421 and</td>
<td></td>
</tr>
<tr>
<td>435*</td>
<td></td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>5</td>
</tr>
<tr>
<td>Health 210</td>
<td></td>
</tr>
<tr>
<td>*Physical Education (from 100 series)</td>
<td></td>
</tr>
</tbody>
</table>

Virginia Endorsement Requirements 12-45
(See Certification Regulations for details. The following totals include semester-hours in the general requirements.)

| Biology                           | (24) | General Science                      | (24) |
| Business Education                | (45) | Geography                             | (18) |
| Chemistry                         | (24) | Government                            | (18) |
| Dramatics                         | (12) | History                               | (24) |
| Earth Science                     | (24) | History and Social Science            | (42) |
| Economics                         | (18) | Journalism                            | (12) |
| English                           | (30) | Mathematics                           | (27) |
| English and Dramatics             | (36) | Physics                               | (20) |
| English & Journalism              | (36) | Psychology                            | (24) |
| English & Speech                  | (36) | Sociology                             | (18) |
| Foreign Language                  | (30) | Speech                                | (12) |

Total 131
TEACHING PHYSICAL EDUCATION

The program for teaching Health and Physical Education is offered by the College of Professional Studies. This program qualifies the individual for the Bachelor of Science in Education Degree with a major in Health and Physical Education and for the Virginia Collegiate Professional Certificate with endorsement in Health and Physical Education. This certificate is valid at both the elementary and secondary school levels.

During the senior year the student will complete a professional semester which will include Health 401, P.E. 470, and Education 435.

The following constitutes the program.

General Education:
See College of Professional Studies section of the Catalog.

Professional Sequence: .................................................. 27
Education 201, 202, 301, 314, 435, and ......................... 21
Physical Education 302, 470 ................................. 6

Major: ........................................................................... 36
Health 205, 210, 401 ..................................................... 9
Physical Ed. (from 100 series) ...................... 4
Physical Ed. 202-203, 205, 350, 351*, 360,

TEACHING IN ELEMENTARY SCHOOLS

The program for teaching in the elementary schools, usually grades Kindergarten through 7, requires completion of a program of 128 semester-hours. To complete this program in four years may require attendance at one or more summer sessions. One semester of the senior year will be a professional semester during which Education 407, 419, and 431, or Education 408, 420 and 432 will be completed. The student will need to decide prior to enrollment in Education 313, or 314, whether he desires to be certified at the Kindergarten – Grade 3 level, or at the Grade 4 – Grade 7 level.

The following is the program leading to the awarding of the Bachelor of Science Degree in Elementary Education and the Virginia Collegiate Professional Certificate with endorsement at the Kindergarten – Grade 3 level, or the Grade 4 – Grade 7 level.

General Education and Electives:

Note: 1. To be endorsed for Driver Education also, the student must elect Health 402 in addition to the major sequence.

*Women only
**Men only
GEORGE MASON UNIVERSITY

See College of Professional Studies section of the Catalog.

Professional (Major) Sequence: ........................................ 36
(K-3 level) Education: 201, 202, 301, 313, 401, 405, 407, 419, 431, and Health 301 ........................................ 36
or
(Grades 4-7) Education: 201, 202, 301, 314, 402, 406, 408, 420, 432, and Health 301 ........................................ 36

COURSES

EDUCATION

The courses listed constitute the undergraduate program. Courses in the 200 and 300 series are open to all undergraduates. The 400 series of courses are open only to those students who have been admitted to the Teacher Education Program. Courses in the 400 series may be taken for graduate credit by students admitted to a graduate program. Students may not receive credit for more than one of the comparable courses relating to Kindergarten and Primary grades and the Intermediate grades. For example, students taking Education 313 may not receive credit for Education 314.

201, 202: HUMAN GROWTH AND DEVELOPMENT. [3, 3]
Designed to acquaint prospective teachers with the area of human growth and development with emphasis on childhood and adolescence. Included are studies of intelligence, physical, social, and emotional development emphasizing the underlying causes of behavior. The behavioral characteristics of different age levels, individual differences, and methods of adjustment are considered. Field experiences in public schools are included.

301: FOUNDATIONS OF EDUCATION. [3]
Prerequisite: Education 201, 202 for Elementary Education majors only. The historical and philosophical foundations of education are surveyed with emphasis on the development of American education and those persons influencing it. A survey of the area of teaching as a profession to include current issues and problems in education is made. The relationships between educational objectives, the structure of the educational system, and curricula are considered. Field experiences in public schools are included.

313: EDUCATIONAL PSYCHOLOGY FOR THE TEACHER IN KINDERGARTEN AND PRIMARY GRADES. [3]
COURSES OF INSTRUCTION

Prerequisite: Education 201, 202. Designed to acquaint the prospective teacher with the principles of psychology and their application to teaching at the kindergarten and primary grade levels. The various aspects of the learning process, individual differences, and adjustment are considered. Emphasis is placed on evaluation of pupil progress, development of personality and attitudes, and motivation. Field experiences in public schools are included.

314: EDUCATIONAL PSYCHOLOGY FOR THE TEACHER IN THE INTERMEDIATE GRADES. [3]
Prerequisite: Education 201, 202. Designed to acquaint the prospective teacher with the principles of psychology and their application to teaching at the intermediate grade level. The various aspects of the learning process, individual differences, and adjustment are considered. Emphasis is placed on evaluation of pupil progress, development of personality and attitudes, and motivation. Field experiences in the public schools are included.

319: EDUCATIONAL PSYCHOLOGY FOR THE TEACHER IN THE SECONDARY SCHOOL. [3]
Prerequisite: Education 301. Designed to acquaint the prospective teacher at the secondary level with the application of psychology to teaching. The areas covered include concepts of intelligence, learning theory, evaluation of student progress, the development of personality, social and emotional behavior, attitudes, and motivation of the student. Field experiences in public schools are included.

401: TEACHING METHODS IN THE KINDERGARTEN AND PRIMARY GRADES. [3]
Prerequisite: Education 301. The organization and conduct of learning experiences provided children in the kindergarten and primary grades are considered. Emphasis is placed on a balance of activities during the school day, developing an understanding of the approaches used in teaching, unit and lesson planning. Major emphasis is placed on the teaching of art and the social studies. Field experiences in public schools are included.

402: TEACHING METHODS IN THE INTERMEDIATE GRADES. [3]
Prerequisite: Education 301. Deals with the organization and direction of learning experiences provided for children in the intermediate grades. Emphasis is placed on a balancing of activities during the school day, developing an understanding of the approaches used in teaching, and unit and lesson planning. Major emphasis is placed on the teaching of art and the social studies. Field experiences in public schools are included.

*407: TEACHING OF READING AND LANGUAGE ARTS IN THE KINDERGARTEN AND PRIMARY GRADES. [3]
Prerequisite or corequisite: LAC 405. A study of the theory, methods,
practices, and materials involved in the teaching of communications skills with emphasis on reading for comprehension, writing skills, speech, grammar, vocabulary development, and use of reference materials. Field experiences in the public schools are included.

*408: TEACHING OF READING AND LANGUAGE ARTS IN THE INTERMEDIATE GRADES. [3]
Prerequisite or corequisite: LAC 406. A study of the theory, methods, practices, and materials involved in the teaching of communications skills with emphasis on reading for comprehension, writing skills, speech, grammar, vocabulary development, and use of reference materials. Field experiences in public schools are included.

*416: TEACHING METHODS IN THE SECONDARY SCHOOLS. [3]
Prerequisite: Education 319. A study of the theories, practices, and methods involved in teaching. Emphasis is placed on the development of course, unit, and lesson plan objectives; development of units, evaluation of student progress, classroom management, providing for individual differences, and techniques used in motivation. Field experiences in the public schools are included.

*419: TEACHING OF SCIENCE IN THE KINDERGARTEN AND PRIMARY GRADES. [3]
Prerequisite: LAC 405. A study of the theory, methods, practices, and materials involved. Emphasis is placed on the relationship of the child to the environment leading to the development of basic generalizations in science. Field experiences in the public schools are included.

*420: TEACHING OF SCIENCE IN THE INTERMEDIATE GRADES. [3]
Prerequisite: LAC 406. A study of the theories, practices, methods, and materials involved. Emphasis is placed on teaching broad concepts in the areas of earth-space science, chemistry, and physical science. Field experiences in the public schools are included.

*421: INSTRUCTIONAL MEDIA. [3]
Prerequisite: Education 313, 314, or 319. Corequisite: Education 401, 402, or 416. A study of the theory, methods, and practices involved in the use of instructional media in the teaching learning situation with emphasis on the secondary school level. Specific training in the use of audio-visual devices and equipment is included. Particular attention is given to the selection, evaluation, and utilization of media in relation to the particular instruction involved. Field experiences in the public schools are included.

*431: STUDENT TEACHING IN THE KINDERGARTEN AND PRIMARY GRADES. [9]
Prerequisites: Senior standing, an overall grade point average of 2.100 (2.3000 for those admitted to teacher education after Summer, 1972),
COURSES OF INSTRUCTION

Education 407 and 419. A full-time program of ten weeks' duration in a public school involving the study of pupils, observation of teaching, preparation of instructional materials, teaching, and participation in other school activities.

*432: STUDENT TEACHING IN THE INTERMEDIATE GRADES. [9]
Same as *431 except course prerequisites which are 408 and 420.

†*435: STUDENT TEACHING IN THE SECONDARY SCHOOL. [9]
Same as *431 except course prerequisites which are 416 and 421.

440: INDEPENDENT STUDY IN EDUCATION. [2 or 3]
Prerequisite: Admission to Teacher Education Program and permission of Department Chairman. By arrangement. Various subjects, principally by directed study, discussion and research. Among the subject areas in Education are: Elementary Science; Reading; The Slow Learner; Mathematics; English; Social Science; Arts and Crafts; Health; Secondary Science; Language Arts; Child Growth and Development; Culturally Deprived; Social Foundations; Music; Learning Disabilities; Guidance; and The Mentally Retarded.

HEALTH

205: SAFETY EDUCATION. [3]
Safety problems relating to water sports, non-motorized vehicles, and home environment are discussed and safety materials, methods and techniques are developed. Liability, prevention and emergency care of all types of injuries with reference to first aid and athletics. Proper use of personnel, facilities and equipment. Includes Red Cross Standard First Aid Certification. Two lectures; three laboratory hours.

210: PERSONAL AND COMMUNITY HEALTH. [3]
Prerequisite: None. Designed to provide the prospective teacher with the information needed to function effectively in a public school. Emphasis is placed on health problems involving mental illness, alcohol, tobacco, drugs, venereal disease, communicable diseases, and accidents. Attention is also given to medical care, physical fitness, nutrition, weight control, and community and world health problems.

301: TEACHING HEALTH AND PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. [3]
Prerequisites: Health 210 and two Physical Education courses in the 100 series. Designed to provide the prospective teacher with information

*Taught as a block of 15 semester-hours during the professional semester.
†Not counted within the 120 hours required for the B.A. Degree for students entering September, 1971 and after.
concerning the theory, methods, and materials involved in the teaching of physical education, health, safety, and recreation in the elementary school. Emphasis is placed on the application of methods and materials to classroom and playground situations. Field experiences in the public schools are included.

401: THE SCHOOL HEALTH PROGRAM. [3]
Prerequisite: Health 210. Course deals with the three areas of the school health program — health services, healthful school environment and health education — as the interrelated responsibility of both school and community. Major emphasis is placed on health education curricula and methods appropriate for the intermediate and secondary schools. Field experiences in public schools are required.

402: DRIVER EDUCATION. [3]
Critical analysis of traffic accidents, attitude factors, essential knowledge of automobile operation, traffic laws and regulations. Includes introduction to laboratory experiences in the use of psychophysical and psychological tests in the development of driving skills, practice driving instruction and teaching. Two lecture hours, three laboratory hours.

PHYSICAL EDUCATION

Activity Courses

A variety of activities taught for physical conditioning and recreational values. Instruction in the techniques, rules, and strategy of play in three hours of activity each week. Cannot be counted within the 122 hours for the B.S. degree in Business Administration or within the hours required for a degree in the College of Arts and Sciences.

101: SOCCER AND VOLLEYBALL. [1] For Men
111: BASKETBALL AND SOCCER. [1] For Women
114: SPEEDBALL AND SOFTBALL. [1] For Women
121: FLAG FOOTBALL AND BASKETBALL. [1] For Men
123: TENNIS. [1] For Men
131: VOLLEYBALL AND FIELD HOCKEY. [1] For Women
133: TENNIS. [1] For Women
140: GOLF. [1] Co-Educational, (A student fee is collected)
COURSES OF INSTRUCTION

141: BEGINNING MODERN DANCE. [1] Co-Educational

151: BADMINTON AND TENNIS. [1] Co-Educational

161: ARCHERY AND GOLF. [1] Co-Educational

202, 203: FUNCTIONAL ANATOMY, PHYSIOLOGY, KINESIOLOGY. [5, 5]
Prerequisite: Completion of Laboratory Science requirement. Physical Education 202 is required for Physical Education 203. Course deals with an integration of knowledge pertaining to human anatomy, kinesiology, applied physiology and tests and measurements related therein; such as strength, power, flexibility, agility, balance and cardiorespiratory efficiency. Four lecture hours, three laboratory hours.

205: FUNDAMENTALS OF MOVEMENT. [1]
Elements of movement and the study and practice of basic movements as the foundation upon which the more specialized skills are built. Emphasis is placed upon developing the student's ability in observing and analyzing movement and movement patterns. Three class hours.

302: PHYSICAL EDUCATION FOR THE ELEMENTARY SCHOOL. [3]
Prerequisite: Physical Education 202, 203. Basic philosophy, characteristics, content and method of the program in the elementary school. How to plan and organize the program; elements in a balanced program; facilities, equipment and evaluation. Field experiences are included. Two lecture hours, three laboratory hours.

350, 351: EDUCATIONAL DANCE. [2, 2]
Prerequisite: Physical Education 205. Physical Education 350 is required for Physical Education 351. The first semester deals with the qualities of expressive movement, rhythmic form and movement theories appropriate for the elementary school as well as the teaching process. Fundamentals of folk and square dance are also included. The second semester includes content and methods for the secondary school and the historical and philosophical foundations of dance forms. Field experiences are included. One lecture hour, three laboratory hours.

360: GYMNASTICS, TRACK, AND FIELD. [1]
Prerequisite: Physical Education 202, 203. The study of the presentation, progressions and safety measures related to teaching basic fundamentals of gymnastics. Includes basic movement skills, developmental exercises, tumbling apparatus. Techniques of and procedures in teaching track and field events. Field experiences are included.

361, 362: TECHNIQUES AND TEACHING INDIVIDUAL SPORTS. [1, 1]
Prerequisite: Two semesters of Physical Education Activities in Individual Sports. This two-semester course is a study of techniques, skills and organization involved in teaching individual sports. Fall: tennis and badminton. Spring: archery and golf.

364, 365: INTRAMURALS AND OFFICIATING. [1, 1]
Prerequisite: Two semesters of Physical Education Activities in Team Sports. Physical Education 364 is required for Physical Education 365. Fundamental principles and concepts governing the organization of intramural programs in schools. Includes practice and techniques in officiating sports. One lecture hour, three laboratory hours.

366: COMBATIVE SPORTS. [1]
Prerequisite: Physical Education 350. Teaching methods, materials, theory and practice in boxing, judo, and wrestling including the theory and practice of physical conditioning. For men.

367: COACHING INTERSCHOLASTIC SPORTS. [1]
Prerequisite: Physical Education 350. Principles and techniques applicable to the coaching of team sports. Includes the study of physiological requirements specific to the sports, refined drills, analysis of positions, and tactics in football, basketball, baseball, soccer, cross country, track and field events, and scouting procedures. For men.

406: RECREATION AND OUTDOOR EDUCATION. [3]
Prerequisite: Senior year. Techniques of recreational leadership: community resources, supervision and evaluation, methods of converting leisure into useful and cultural achievements. Participation in such areas of outdoor living skills as axemanship, fire building, outdoor cooking, shelters, mapping, compass and camp sanitation. Two lecture hours, three laboratory hours.

470: PHYSICAL EDUCATION CURRICULUM AND METHODS IN THE SECONDARY SCHOOL. [3]
Prerequisite: Physical Education 302. Theory and practice of the professional aspects of physical education. Included are methods and materials, audio-visual aids, safety precautions, evaluation and other topics related to the teaching and guidance of youth in physical education activities. Field experiences in public schools are required. Two lecture hours, three laboratory hours.

LIBRARY SCIENCE

Courses in Library Science are offered to enable students to qualify as school librarians in addition to certification at the elementary or secondary level. Those students electing to qualify as school librarians in addition to their normal program will spend a portion of their student teaching period in directed library practice. The following are the courses required for certification as a school librarian: Education 421, and 431 or 432 or 435; LAC 405 or 406; Library Science 401, 402, 403, and 404.
COURSES OF INSTRUCTION

401: ADOLESCENT AND ADULT LITERATURE FOR YOUNG PEOPLE. [3]
Prerequisite: Admittance to the Teacher Education Program. Adolescent and adult literature for young people relating to historical developments, types, principles of critical analysis, recent developments, and usage in the junior and senior high school.

402: REFERENCE WORK AND BIBLIOGRAPHY. [3]
Prerequisite: Admittance to the Teacher Education Program. Reference and bibliographic skills for elementary and secondary school librarians.

403: TECHNICAL PROCESSING FOR SCHOOL LIBRARIES. [3]
Prerequisite: Admittance to the Teacher Education Program. Techniques of cataloging and classification for elementary and secondary school librarians.

404: ADMINISTRATION OF SCHOOL LIBRARIES. [3]
Prerequisite: Library Science 401, 402, and 403. Problems of administering an elementary or secondary school library. Includes organizational plans, teaching duties, finances, reports, and equipping a school library.
Department of General Studies

There is no major in this department. The purpose of this department is to house general education courses developed primarily by and for the College of Professional Studies, academic area offerings adapted for the elementary school level curriculum content, academic area courses adapted for special professional needs and unsuitable in the traditional liberal arts framework, and advanced transfer-credit blocks for non-traditional but none-the-less academic-related lectures and practical experiences directly and clearly professional in nature. The department also is the agency coordinating the service course offerings by the other Colleges for the College of Professional Studies general-education core.

The courses, whether "service" in nature from elsewhere or listed in this department, are divided into three areas whose titles describe the nature of appropriate content within their respective areas: language arts and culture, social studies, and general and health sciences.

COURSES

LANGUAGE ARTS AND CULTURE

Art

LAC 273: ART FOR THE ELEMENTARY SCHOOL. [3]
Prerequisite: Education 201. Theory, techniques and materials in art structure related to the personal growth of children. Class meets six hours per week.

English

LAC 405: CHILDREN'S LITERATURE FOR THE KINDERGARTEN AND PRIMARY GRADES. [3]
Prerequisite or corequisite: Education 401. Survey of children's literature suitable for the kindergarten and primary grades. The historical development, types, representative authors and illustrators are studied. Critical analyses of selected works are made. The habits and interests of children in the kindergarten and primary grades are studied. The techniques of story telling and the presentation of literature to children are studied and practiced. Field experiences in the public schools are included.

LAC 406: CHILDREN'S LITERATURE FOR THE INTERMEDIATE GRADES. [3]
Prerequisite or corequisite: Education 402. Survey of children's literature with emphasis on literature suitable for the intermediate grades. The historical development, types, representative authors and illustrators are studied. Critical analyses of selected works are made. The
habits and interests of children in the intermediate grades are studied. The teaching of story telling and presentation of literature to children are studied and practiced. Field experiences in public schools are included.

Music

LAC 182: MUSIC FOR THE ELEMENTARY SCHOOL. [3]
Study of notational, tonal, and rhythmic aspects of music for the elementary school. Both participatory and listening activities will be developed, practiced and observed. Class meets five hours per week.

Regional Cultures

LAC 151: LATIN AMERICA. [3]
Study of life in this region as it is today with emphasis on the cultural (art, music, philosophy) features and the practical (governmental, economic, and sociological) aspects plus an overview of essential historical background.

LAC 152: AFRICA AND THE MIDDLE EAST. [3]
Study of life in this region as it is today with emphasis on the cultural (art, music, philosophy) features and the practical (governmental, economic, and sociological) aspects plus an overview of essential historical background.

Study of life in this region as it is today with emphasis on the cultural (art, music, philosophy) features and the practical (governmental, economic, and sociological) aspects plus an overview of essential historical background.

Speech

LAC 355: ORAL INTERPRETATION IN THE ELEMENTARY SCHOOL. [3]
Pre- or corequisite: Education 405 or 406. Studying the principles involved in the interpretation of the written word in its intellectual, emotional, and aesthetic entirety. Practice with prose and poetry utilizing the literature appropriate to kindergarten and elementary school children.

Philosophy, literature, religion, et cetera (see standard A&S offerings scheduled for CPS students).

SOCIAL STUDIES

GEORGE MASON UNIVERSITY

GENERAL AND HEALTH SCIENCES

Mathematics

GHS 371, 372: MATHEMATICS FOR THE ELEMENTARY SCHOOL I, II. [3, 3]
Prerequisite: Forty-five semester-hours of college credit. Concepts and theories underlying elementary school mathematics.

Biology, chemistry, physics, et cetera (see standard A&S offerings scheduled for CPS students).
Degrees, Honors, Awards

Degrees Conferred

Awards
Degrees Conferred June, 1971

Bachelor of Arts

Major in Biology

Robert James Alexander
Jerry J. Deola, with distinction
Michael Byron Elliott, with distinction
William Lee Lancaster

Major in Business and Public Administration

Larry Wayne Avery
Ross Lyman Bond
Clay T. Brittle III
Joseph John Calabrese III
David Marc Claveloux
Andrew Leeds Cushman, Jr.
Danny W. Funkhouser
Stephen D. Garnett
Patricia Ann Gibson
Mary Ann Grassino
Bruce Marshall Green
Scott C. Harrison, with distinction
Robert L. Hearne
Michael E. Henry III
George William Hooper
John D. Hughes, Jr.
Gary Brian Klug
James Edward Lawhorn
Thomas Carl Mawson
Kim Allen McLeland
John Mercer
Joseph Anthony Nardelli, Jr.
Philip Van Klleeck Nichols
Michael P. Petro
Lynne D. Rathburn
Rodney Edward Rice III
James Alan Roby
Donald L. Rosholt
Richard Keith Rytter
Evelyn Ruth Sconce, with distinction
Yvonne Haughwout Scott
Gregory Brett Smith
Michael T. Sprague, with distinction
Timothy Robert Summers, with distinction
Phillip Frederick Tonolli
DEGREES, HONORS, AWARDS

Anthony J. Vogel
Harold Reynolds Woodyard, Jr.

Major in Chemistry

Thomas K. Brown
William Ernest Dorion, with high distinction
Stephen Dupre Fischer, with distinction
Gaylord L. Haas

Major in Economics-Mathematics

Craig Alan Muir

Major in Economics

Paul R. Beauchemin
Joseph Bernard Connelly
Willard Link Demory, with high distinction
Rafael E. Diez
Mark Canzy Lorenzo, with distinction
Karen Ellis Ludwig, with distinction
Celeste Nicole Mendez
Edward J. Murphy, with distinction
Thomas Richard Overstreet, Jr., with distinction
James Stephen Prohaska
Ronald Dean Roth, with distinction

Major in English

Kathleen C. Adgate, with distinction
Jeremi Aylward
Patricia A. Barton
Carole R. Bencich, with high distinction
Dianne Lee Caldwell
Mary Ellen Carney
Mary Louise Cotulla
Patricia Kate Craven
Lawrence Trustlove Dale III
Kathleen Louise Dalton
Barbara Sharon Dodson, with distinction
Linda Jayne Gamble
Douglas Randall Gentry
Lorena Shepston Gilham
Nancy Kay Grim
Sheila Moore Holsinger, with distinction
Robert Grayson Karnes
Carol Patricia Kelley
Joan Dickey Lawson, with high distinction
GEORGE MASON UNIVERSITY

Nancy Geris Lusk, with high distinction
Beatrice Ebert Martinez
Elaine Frances Meredith
Marianne S. Newman, with distinction
Arlene Lavinia Pripeton, with distinction
Carolyn Suzanne Pyuen, with distinction
Margaret Ann Quam
Hanna Fawley Remington
Dale Angela Rizzo
William John Romano
Helen Jean Salerno
Lynda Mary Schaeffer
Linda J. Scolaro
Rebecca Gray Thomasson
Deirdre J. Turnage, with distinction
William S. Walsh

Major in French

Chantal de Chaunac-Lanzac
Diane Carter Eaton
Marcelle Doriane Leet
Robert R. Pelletier
Rose-Marie Tessier, with distinction
Ghislaine Tulou, with highest distinction
Sylvia von Schwanenfluegel

Major in History-Spanish

Albert Holmes Tillson, Jr., with distinction

Major in History

Malek Khosrow Amirshahi
Charles Curtis Ballenger
Anne Holbert Beattie
Diane Billings, with high distinction
Georgeanne Blinebury
David Francis Blount, with distinction
Peter Newkirk Braun
Patrick H. Brown
Patricia Shahan Brudzinski, with distinction
Lianne Iddings Burke, with distinction
Edward Henry Chapman
Teresa J. Churney
Christine Adair Clark, with distinction
William Palmer Clark
Carl M. Conner
Janet Marie Deeney, with distinction
DEGREES, HONORS, AWARDS

Gorman Stafford Donegan, Jr.
Brendan Hugh Egan, Jr.
Timothy A. Farnham
Cleborne Dean Foster, Jr., with distinction
Thomas Daniel Garrett
Virginia O'Donohue Gavaghen
Paul Carrington Gibert, Jr.
William Dean Griffith, Jr.
James Edward Guzdowski
Patricia Stephanie Hagan
Phyllis E. Hedeman
Robert Kenny Hedrick, Jr.
Beulah M. Helgeson, with high distinction
Thomas Michael Holland
Christine Frances Hughes, with high distinction
William Lamar Huie
Scott Stanton Ickert, with distinction
Robert David Johns
Kenneth Earl Kanline
Barbara Kerner
Heinz G. Kuther
Robert Gregory Lee
Jonathan Leet V
Phyllis Armstrong Maloy, with distinction
Stephen James Mayhew
Lawrence Donald Maysack, with distinction
Dan Robert Moorefield, with distinction
Corinne Grace Mulligan
John Edward Musgrove
Patsy Flowers Myracle
Margaret Ann Orpin, with distinction
William Craig Osborne, with distinction
Sheryl L. Owen
Brian Gordon Page, with distinction
Patrick L. Palmer
Paul A. Panella
Faith Peters Parker
David Norman Petersen
Robert Paul Pitner
James C. Pruett, Jr.
Susan Watson Pryor
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David Ring Smith
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Rosanne M. Thaiss, with highest distinction
Timothy R. Tompas
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Patricia Louise Willette
GEORGE MASON UNIVERSITY

Sara Diane Williams

Major in Mathematics

Abderraouf Benbrahim
Marilyn T. Dargusch, with high distinction
Stephen Robert Gaffney, with distinction
Lynda Bonita Gore, with distinction
Joanne Dolores Grefenstette, with highest distinction
Robert Jay Ho
Sharon Marie Kruse
Howard E. Martfeld
Clark C. Miller
Diana Patricia Montague
Doris Miller Robinette, with distinction
Herbert E. Robinson III
Lucille Agnes Selfridge
Karen S. Swift
John Willard Totten
Pamela Stark Woodard

Major in Physics

Thomas E. Brassel

Major in Psychology

Nancy E. Antonides, with distinction
Aldor Kermit Berg, Jr., with distinction
David Daniel Bingham
Dorothy Kathleen Blum
Jacqueline Renee Brown
Melinda Jane Burnette
Charles Louis Carroll, Jr.
John Alan Dawson
Jon Scott Freda
Ann Hurlock Gish
Michael Collins Golla
Thomas Robert Hopkins
Mary Susan Jones
James McCormick Kendall, with distinction
Robert Edward Lilly II
D'Arcy Lester McGreer
Elizabeth Saba Molchany
Frank John Rooney
Elizabeth Jane Snyder, with high distinction
Earl B. H. Sutherland, Jr., with distinction
Elizabeth M. Tongue
William P. Whalen, Jr.
DEGREES, HONORS, AWARDS

Kirk Douglas Wrigley, with distinction

Major in Sociology

Deborah Mary Dougherty

Major in Spanish

Paula B. Kleinfeld
Kathleen Macdonald, with distinction
Karen Andrea Marsey, with distinction
Stephanie Paula Rosen, with distinction
Grayson Hammond Stup, Jr.
Joan Dee Vinci

BACHELOR OF SCIENCE

Major in Biology

Doris Natalie Hill Eidsness, with high distinction
Matthew Allen Gonda, with distinction
Mariann Elizabeth Hiits, with high distinction
Andrea Jean Mathe
Susan Ann Perlin, with high distinction
Ronald Lee Schmied
Robert F. Shepanek
John Randall Strohl
Michael C. White

Major in Elementary Education

Nancy Lynn Alcorn, with distinction
Christine M. Andrews
Charlotte Lea Armstrong
Katherine Perkins Baird
Virginia M. Baker
Sharon Ann Bander
Marjorie Garvey Blanton, with distinction
Margaret Arrington Bloom, with distinction
Carolyn Mitchell Boggs
Nancy R. Boush
Kathe L. Bowman
Lea Rae Brem
Cynthia Marie Burosh
Joann R. Bush
Halina S. Espen
Linda Lamb Fisher
Dana C. Fosselman
GEORGE MASON UNIVERSITY

Sharron Brads Galke, with highest distinction
Linda Marlene Gaudreault
Helen Racz Golden, with high distinction
Patricia Alice Harmeling
Antigone T. Harocopos
Thomas J. Hazzard
Donna Kay Heidinger, with distinction
Dolores Bentley Kent, with high distinction
Joan Kunz
Christiana Heriot LeBoeuf
Lorraine Antonina Liggio
Donna Florence Lonegan, with distinction
Susan LeRoy Long, with distinction
Karen L. Loveridge
Martha Lee Mercer
Juliette Floyd Middleton
Arlene Louise Moore
Virginia Meredith Moore
Monica Ann Newberry
Jan Smart O'Kelley
Donna Jeanne Onasch
Pamela Ellen Posey
John Wright Prohaska
Diane J. Prout
Susan Mary Schalestock, with distinction
Edith Margaret Seymour, with distinction
Jennie M. Sinsabaugh
Joyce K. Strickhouser, with distinction
Joan Helen Sturtz
Carol Ann Thomson, with high distinction
Janet B. Trowbridge, with distinction
Lina Gail Tunick
Lauretta Jean Wilgus
Margarete N. Wolaver, with distinction
Deborah Louise Zane

Major in Mathematics

Sharon Leah Baker, with distinction
Jean Meyer Barch
Robert F. Bartelmes
Michael Eugene Murphy
William Zev Zahavi

Major in Physics

Paul Francis Skeffington
Randolph Michael Tauss, with distinction
Degrees Conferred August, 1971

BACHELOR OF ARTS

Major in Biology

Jill Nannette Meyer
Mary Margaret Swenson, with distinction

Major in Biology-History

Robert L. Cushing, Jr., with distinction

Major in Business and Public Administration

Charles K. Boles
Nancy Chow
Richard John Guerard
Joseph Clay Hale
Richard Carter Hardin
Rebecca Kay Macaulay
Charlie Lee Martin, Jr.
Marvin Wallace Morris
Harold F. Nelson
Gary Clifford Olien
Robert H. Rauch
Pedro Rodriguez Zayas-Bazan
Barrie Wilson Sivertson
Alan Robert Truitt
James Paul Wentworth

Major in Economics

Deborah Corinne Thompson

Major in English

Douglas P. Ayers, with distinction
Susanne Evelina Baker
Dallas W. Downes
Janis Ellen Fowler
Carolyn J. Hannebaum
Odile Robinson Huddleston, with distinction
Irving Edward Johnson, Jr., with distinction
Nila Jacqueline Slusher
Leila Shelly Southwell
Dean Craig Stecker
GEORGE MASON UNIVERSITY

Major in History

Stephen Emerson Ballard
George Howe Brock
Patricia P. Burke
Carole Oliver Davenport
Michael Paul Duffner
Richard Devin Hall
Richard J. Harris, with distinction
John Michael Kalepp
Alan W. Law
Joan Elizabeth Gardner Parris, with high distinction
Mary Schupp
Lisa Anita Wood, with distinction

Major in Mathematics

George Michael Bradshaw
Robert Lowell Hix, Jr., with distinction
Frank Jay Moore III
Charles F. Overend, Jr.
John A. Soule

Major in Psychology

Tracy Jeanne Brown, with distinction
B. Scott Daniels
Martha Ann Graves, with highest distinction
William Jacob Hirsch, Jr.
Nancye C. Petitt
Kristopher Kesner Shaffer
Constance Ann Sheller

Major in Sociology

Aleta Richards Ellis
M. Margarita Suarez

Major in Spanish

Patricia Glaser Mazo

BACHELOR OF SCIENCE

Major in Biology

Thomas Wayne Allder
Barney E. Winecoff
DEGREES, HONORS, AWARDS

Major in Mathematics

Patricia Jacobs Rizzo, with highest distinction

Major in Elementary Education

Paula Frost Bell, with high distinction
Marilyn J. Bradberry, with high distinction
Geraldine Fleming Buchanan
Patricia M. Cookston, with high distinction
Nancy Rath Crippen, with high distinction
Elka Gundel Deede, with high distinction
Patricia Ellen De Lorenzo
Linda O. French
William F. Graves, Jr., with distinction
Lillie H. Gray, with high distinction
Ann C. G. Heilman
Barbara Phelps Henderson, with distinction
Roxanna Redmond Johnson, with high distinction
Dolores Ann Lemieux
Judith L. A. Leshner, with distinction
Janis Katherine Livernash
Lynn Lee Luessen
Phyllis W. Mayock
Beauretta Jewel Ramey
Harriet Ellen Hunter Richberg, with distinction
Rosemarie Rizzuto Rinaldi
Lallie Burba Sheard, with distinction
Gail Susan Siegel
Margarette Smither
Betty Miller Sparks
Bonnie Marie Blandy Steele
Patricia Thomas, with distinction
Linda Susan Trexler
Eleanor Breazeale Troutman
Linda Jane Franklin White
Sandra Silverman Wolensky
Suellen Frances Zwicker

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Second Prize: Martin Gurri
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Poetry:

First Prize: Martha Arnold
Second Prize: Douglas Ayers
Third Prize: Graham Ellis

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The Weber H. Peterson Memorial Award in Economics was established by the students of George Mason College to be conferred annually, beginning with the academic year 1970-71, upon an outstanding qualified senior major in economics.

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Most Valuable Athletes: Richard M. Johnson, Joseph N. Martin
Most Valuable Basketball Player: Robert Penland
Most Valuable Baseball Player: Bruce M. Wood
Most Valuable Soccer Player: Michael H. Burke
Most Valuable Golf Player: Joseph N. Martin
Most Valuable Tennis Player: Richard M. Johnson
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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. Fragale ....................................................... Falls Church
Carol M. Griffee .......................................................... Alexandria
John T. Hazel, Jr. .......................................................... Fairfax
Warren Joseph Pace ..................................................... Falls Church
Lutrelle Fleming Parker, Sr. ........................................... Arlington
Lester G. Sturgill .......................................................... Leesburg
Currell Hunton Tiffany ................................................ Warrenton
Administration

CHANCELLOR'S OFFICE

Lorin Andrew Thompson, B.A., M.A., Ph.D. .......... Chancellor

ACADEMIC AFFAIRS

Robert Charles Krug, B.S., M.S., Ph.D. ........ Dean of the Faculty

Leon Estel Boothe, B.S., M.A., Ph.D. ........ Dean of the Graduate Program

Clayton Moss Schindler, B.A., M.S., Ph.D. ........ Dean of the College of Arts and Sciences

William Cargill Johnston, B.A., M.S., Ph.D. Dean of the Summer Session

BUSINESS OFFICE

Henry Patteson Adams, B.S. .................. Business Manager

DEVELOPMENT AND INFORMATION

John William Gephart, B.S., M.S.B.A. .......... Director of Development

William Moore McDowell, B.A., M.A. .......... Assistant to the Chancellor

STUDENT AFFAIRS

Robert Amrine Turner, B.S., M.A.T. ........ Dean of Students

Mark Alan Tannenbaum, B.A., M.A. .......... Director of Financial Aid and Placement

ADMISSION AND RECORDS

Louis John Aebischer, B.S., M.S. ................. Director of Admissions

Joseph William Grant Jr., B.A., M.Ed. Assistant Director of Admissions

John Patrick Sullivan, B.S., M.A. ................ Registrar

PLANNING AND RESEARCH

James Hastie Clark, B.S. .................. Director of Planning

John Patrick Sullivan, B.S., M.A. ........ Director of Institutional Analysis

161
GEORGE MASON UNIVERSITY

COUNSELING

Walter Jennings Moretz, Jr., B.A., B.D., Ph.D. .......... Director of University Counseling Center

CHARLES ROGERS FENWICK LIBRARY

Patrick Joseph Larkin, A.B., M.S. ................ Library Director
Richard Bennett O'Keeffee, B.A., M.S.L.S. . Assistant Library Director

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Faculty*

ADAMS, Henry Patteson, Associate Professor, Business Manager. B.S., United States Naval Academy, 1939.

AEBISCHER, Louis John, Associate Professor of Education, Director of Admissions. B.S., Syracuse University, 1936; M.S., Syracuse University, 1947; Ed. S., George Washington University, 1971.

AGUERA, Victorio Garcia, Assistant Professor of Spanish. B.S.T., Colegio Mayor Teologico Hispano-americano, 1958; M. A., Catholic University, 1970; Ph. D., Catholic University, 1971.

ANDREWS, Alice Chandler, Lecturer in Geography. A.B., University of Georgia, 1949; M.A., Northwestern University, 1950.

ANDRYKOVITCH, George Eugene, Assistant Professor of Biology. B.S., University of Pittsburgh, 1962; M.S., University of Pittsburgh, 1965; Ph.D., University of Maryland, 1968.

**ARRIOLA, Paul Manuel, Associate Professor of Spanish. B.A., San Diego State College, 1947; M.A., University of California, 1949; Ph.D., University of California, 1956.


AUSTIN, Virginia LaRose, Assistant Professor of Education. B.S.M., DePauw University, 1931; M.Ed., University of Maryland, 1954.


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


*This list is a record of the 1971-72 faculty

**deceased March, 1972.
GEORGE MASON UNIVERSITY

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

BLOECKER JR., Victor, Instructor in Education. B.S., University Of Pennsylvania, 1942; M.A., University of Southern California, 1950.

BOOTHE, Leon Estel, Associate Professor of History. Dean of the College. B.S., University of Missouri, 1960; M.A., University of Missouri, 1962; Ph.D., University of Illinois, 1966.


BRADLEY, Ted Ray, Assistant Professor of Biology. B.S., Rollins College, 1962; M.A., University of North Carolina, 1966; Ph.D., University of North Carolina, 1968.

BROOKS, Nancy Cook, Assistant Professor of Spanish. A.B., University of Kansas, 1947; M.A., University of Kansas, 1948.

BROWN, Lorraine Anne, Assistant Professor of English. B.A., University of Michigan, 1952; M.A., University of Michigan, 1961; Ph.D., University of Maryland, 1968.

BROWN, Stephen Jeffry, Professor of English. B.A., Yale University, 1950; B.A., Cambridge University, 1952; M.A., Yale University, 1954; Ph.D., Yale University, 1959.

BUFFARDI, Louis Carl, Assistant Professor of Psychology. A.B., University of Rochester, 1964; M.A., Fordham University, 1966; Ph.D., Kansas State University, 1970.

BUFILL, Jose Angel, Assistant Professor of Spanish. B.A., Instituto Del Vedado, 1942; Doctor EnDerecho, University of Havana, 1955; M.A., State University of New York, 1967.

BURT, Amanda Martha, Assistant Professor of Music. B.A., American University, 1965; M.A., American University, 1966; Ph.D., Catholic University of America, 1969.

CABELL, Mary Katherine, Associate Professor of Mathematics. B.A., University of Tennessee, 1955; M.A., University of Virginia, 1957; Ph.D., University of Virginia, 1960.

CANNAVALE, Jr., Frank John, Assistant Professor of Sociology. A.B., Rutgers University, 1964; A.M., University of Pennsylvania, 1967; Ph.D., University of Pennsylvania, 1971.
CARROLL, Jack Charles, Assistant Professor of Education. B.S., Agricultural and Technical College, 1957; M.Ed., American University, 1966; Ed.D., American University, 1970.

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


CASTILLO, Marta Silvia, Lecturer in Spanish. B.A., American University, 1969; M.A., American University, 1970.

CHAMBERS, Barbara Fromm, Assistant Professor of Mathematics. B.S., University of Alabama, 1962; M.A., University of Alabama, 1964; Ph.D., University of Alabama, 1969.

CHILDRESS Jr., Joseph Atkins, Assistant Professor of Mathematics. B.S., Virginia Polytechnic Institute, 1964; M.A., University of Georgia, 1967; Ph.D., University of Georgia, 1970.

CHURCHMAN, Anthony Charles, Acting Assistant Professor of English. B.A., University of Western Ontario, 1964; M.A., University of Western Ontario, 1965.


COHEN, Edmund David, Assistant Professor of Psychology. A.B., George Washington University, 1965; M.S., Case Western Reserve University, 1967; Ph.D., Case Western Reserve University, 1968.


COLE, Hubert Merrill, Associate Professor of Mathematics. B.S., United States Military Academy, 1925; M.S., New York University, 1956.

CORDERO, Anne Deing, Assistant Professor of French. Dipl., Dolmetscher, University of Mainz, 1955; M.A., University of Florida, 1957; Ph.D., George Washington University, 1968.

COZZENS, Robert Francis, Associate Professor of Chemistry. B.S., University of Virginia, 1963; Ph.D., University of Virginia, 1966.
CZARSTY, Steven Lawrence, **Instructor in Business Administration.** B.S., University of Hartford, 1968; M.B.A., University of Connecticut, 1969.

DERR, Laura Muntz, **Instructor in English.** B.A., University of Kentucky, 1968; M.A., University of Kentucky, 1969.

DESHMUKH, Marion Fishel, **Lecturer in History.** B.A., University of California, Los Angeles, 1966; M.A., Columbia University, 1967.

DOMINICK, William Boyce, **Lecturer in Business Administration.** A.B., Furman University, 1921; A.M., University of Chicago, 1925.

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

DUFFNER, Margaret Cain, **Instructor in Speech.** A.B., MacMurray College, 1940; M.A., Northwestern University, 1943.

EARLY, Jr., Stephen Tyree, **Professor of Political Science, Chairman of Department of Social Sciences.** B.A., University of Virginia, 1948; M.A., University of Virginia, 1950; Ph.D., University of Virginia, 1954.

EASSA, Christine Wolynec, **Instructor in Chemistry.** B.Sc., University of Manitoba, 1960; B.Sc. in Ed., Kent State University, 1962; M.Sc., University of Hawaii, 1966.

EAVES, Robert Wendell, **Professor of Education.** A.B., University of North Carolina, 1928; M.A., George Washington University, 1933; Ed.D., George Washington University, 1940.

ELLERT, JoAnn Crisp, **Lecturer in Education.** B.F.A., Syracuse University, 1956; M.A., American University, 1962; Ph.D., American University, 1970.

ELSTUN, Esther Nies, **Associate Professor of German, Chairman of Department of Foreign Languages.** B.A., The Colorado College, 1960; M.A., Rice University, 1964; Ph.D., Rice University, 1969.

EMSLEY, Michael Gordon, **Professor of Biology, Chairman of Department of Biology.** B.Sc., Imperial College of Science and Technology, 1953; A.R.C.S. Associateship of Royal College of Science, 1953; Ph.D., University of London, 1964.

EVANS, Arlette Raymonde, **Assistant Professor of French.** B.A., University of Algiers, 1941; M.S., Georgetown University, 1965.

FEINSTEIN, Hyman Israel, Associate Professor of Chemistry. A.B., University of Michigan, 1930; M.A., Columbia University, 1932.

FLINN, Jane Margaret, Lecturer in Physics. B.A., Oxford University, 1960; M.S., University of California, Los Angeles, 1962; Ph.D., Catholic University, 1969.

FLINT, Ruth Allaire, Assistant Professor of Biology. B.S., University of Massachusetts, 1954; M.S., University of Massachusetts, 1955; Ph.D., University of Maryland, 1970.

FONT, Maria Teresa, Assistant Professor of Spanish. Licenciado, Universidad de Oriente, 1960; Ph.D., University of Maryland, 1969.


GALLEHR, Donald Raymond, Instructor in English. B.A., St. Bonaventure University, 1964; M.A., Fordham University, 1966.

GARSON, Helen Sylvia, Associate Professor of English. A.B., George Washington University; 1946; M.A., University of Georgia, 1947; Ph.D., University of Maryland, 1967.

GEPHART, John William, Associate Professor, Director of Development. B.S., University of Maryland, 1966; M.S.B.A., George Washington University, 1967.


GIBSON, Margaret Ferguson, Instructor in English. B.A., Hollins College, 1966; M.A., University of Virginia, 1967.

GILLS, Jr., Johnny, Lecturer in Mathematics. B.S., Louisiana State University, 1969; M.S., Louisiana State University, 1970.

GILSTRAP, Robert Lawrence, Associate Professor of Education. B.S., North Texas State University, 1954; M.Ed., North Texas State University, 1960; Ed.D., George Peabody College for Teachers, 1963.
GEORGE MASON UNIVERSITY

GLEISSNER, Richard Anthony, Assistant Professor of History. B.S., University of Wisconsin, 1958; M.A., Marquette University, 1959; Ph.D., University of Maryland, 1968.

GODBOLD, John Walter, Assistant Professor of Government. B.A., Millsaps College, 1939; M.P.A., St. Louis University, 1959.


HAWKES, Jr., Robert Thomas, Assistant Professor of History, Assistant Director, University of Virginia Center for Continuing Education. B.A., Randolph-Macon College, 1964; M.A., University of Virginia, 1967.

HAWKINS, Annette Robins, Instructor in Chemistry. A.B., Smith College, 1940.

HAYS, Davis Addison, Instructor in Biology. B.S., Duke University, 1965; M.S., Yale University, 1971.

HENDERSON, Carol Cantlon, Instructor, Librarian. B.A., Ohio State University, 1960; M.S.L.S., Catholic University, 1968.

HO, Alana Wang, Instructor, Librarian. B.A., Providence College, Taiwan, 1964; M.S., Kansas State Teachers College, 1967.

HOBSON, Irmgard Wagner, Assistant Professor of German. Staats-examen Tübingen University, Germany, 1961; M.A., Tufts University, 1965; Ph.D., Harvard University, 1970.

HOLDSWORTH, Robert Houghton, Assistant Professor of Biology. A.B., Oberlin College, 1966; Ph.D., Princeton University, 1971.


HOLMES, Benjamin Fred, Instructor in Geography. B.S., Southeast Missouri State College, 1950; M.A., University of Missouri, 1952.

HOOD, Mary Eileen, Instructor, Librarian. B.A., Women's College of Georgia, 1965; M.L., Emory University, 1966.

HUGHES, John James, Associate Professor of Sociology. A.B., Fordham College, 1944; M.S.W., Fordham University, 1954.

JACKSON, James Louis, 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.

JANSEN, Louise Maria, Instructor in German. M.A., University of Amsterdam, 1963.

JENSEN, Ronald Jacob, Assistant Professor of History. B.A., Coe College, 1961; M.A., Indiana University, 1965; Ph.D., Indiana University, 1971.

JOHNSTON, William Cargill, Professor of Physics, Chairman of Department of Physics, Dean of Summer Session. B.A., Davidson College, 1939; M.S., University of Virginia, 1941; Ph.D., University of Virginia, 1943.

JORDAN, Nehemiah, Professor of Psychology, Chairman of Department of Behavioral Sciences. B.A., Brooklyn College, 1948; Ph.D., University of Kansas, 1952.

JOSLIN, James Kelvin, Assistant Professor of Biology. B.S., University of Wisconsin, 1960; M.S., University of Wisconsin, 1962; Ph.D., Michigan State University, 1971.
JOY, Barnard DeJean, Professor of Education. B.S., Oregon State University, 1930; M.A., University of Maryland, 1934; Ed.D., George Washington University, 1944.


KARLSON, Robert Emil, Associate Professor of English. B.A., College of William and Mary, 1948; M.A., Breadloaf School of English, 1957; Ph.D., George Washington University, 1970.

KEELER, Wayne Hewit, Assistant Professor of Chemistry. B.S., Marietta College, 1964; Ph.D., University of Iowa, 1971.

KELLEY, Michael Robert, Assistant Professor of English. B.A., Catholic University of America, 1962; M.A., Catholic University of America, 1965; Ph.D., Catholic University of America, 1970.

KELSO, Donald Preston, Assistant Professor of Biology. B.S., University of Tennessee, 1962; M.S., University of Florida, 1965; Ph.D., University of Hawaii, 1970.

KHOURY, Angela Jurdak, Associate Professor of Government. B.A., American University of Beirut, 1937; M.A., American University of Beirut, 1938; Ph.D., The American University, 1968.

KILEY, William Thomas, Assistant Professor of Mathematics. B.S., St. Mary's College, 1960; Ph.D., Brown University, 1969.


KLEIN, Barry Michael, Lecturer in Physics. B.S., New York University Graduate School of Arts and Sciences, 1962; M.S., New York University Graduate School of Arts and Sciences, 1965; Ph.D., New York University, 1969.

KREILKAMP, Karl, Associate Professor of Philosophy. A.M., Catholic University of America, 1937; Ph.D., Catholic University of America, 1939.

KRUG, Robert Charles, Professor of Chemistry, Dean of the Faculty, Dean of the Graduate Program. B.S., University of Richmond, 1940; M.S., Pennsylvania State University, 1941; Ph.D., Ohio State University, 1944.
LANKFORD, William Fleet, Assistant Professor of Physics. B.A., University of Virginia, 1960; M.S., University of South Carolina, 1964; Ph.D., University of South Carolina, 1969.

LARKIN, Patrick Joseph, Associate Professor, Library Director. A.B., St. Mary's Seminary and University, 1956; M.S., Catholic University of America, 1963.


LIEB, Jr., Bernard Joseph. Assistant Professor of Physics. B.S., College of William and Mary, 1965; M.S., College of William and Mary, 1967; Ph.D., College of William and Mary, 1971.

LINN, John Roy, Assistant Professor of Health and Physical Education. B.S., Bowling Green University, 1960; M.A., George Washington University, 1967.

LODGE, Ann, Associate Professor of Psychology. A.B., Wilkes College, 1955; Ph.D., Duke University, 1960.


MACCONKEY, Dorothy Ingling, Assistant Professor of Sociology. A.B., Beaver College, 1947; M.A., Wichita State University, 1953.

MADERO, James Nicholas, Acting Assistant Professor of Psychology. B.A., St. John's University, 1965; M.A., Catholic University, 1969.


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

MAO, Agnes Liu, Instructor, Librarian. B.L., National Chengchi University, 1966; M.L.S., University of Maryland, 1970.

MARCHIONE, Anthony Ronald, Acting Assistant Professor of Business Administration. B.A., George Washington University, 1957; M.B.A., Old Dominion University, 1967.
MARTIN, William Reed, Associate Professor of Education. B.A., Gettysburg College, 1955; M.A., Syracuse University, 1958; Ph.D., University of Minnesota, 1968.

MASON, Elliott Bernard, Assistant Professor of Biology. B.S., Loyola University, 1965; M.S., Wayne State University, 1969; Ph.D., Wayne State University, 1972.

McDANIEL, Edward Artie, Assistant Professor of Art. B.A., State University of Iowa, 1949; M.F.A., State University of Iowa, 1951.

McDERMOTT Jr., Michael James, Assistant Professor of Philosophy. A.B., Fordham University, 1958; Ph.L., Loyola Seminary, 1959.

McDOWELL, William Moore, Associate Professor, Assistant to the Chancellor. B.A., DePauw University, 1961; M.A., The American University, 1967.

McFARLANE, William Hugh, Professor of Philosophy, Chairman of Department of Humanities. B.A., University of Virginia, 1950; Ph.D., University of Virginia, 1957.


McKEITHEN, Eleanor Jean, Assistant Professor of Psychology. A.B., University of North Carolina, 1949; M.A., Syracuse University, 1952; Ph.D., Syracuse University, 1962.


MIELCZAREK, Eugenie Vorburger, Professor of Physics. B.S., Queens College, 1953; M.S., Catholic University, 1957; Ph.D., Catholic University, 1963.

MOLIN, Sven Eric, Associate Professor of English. B.A., Amherst College, 1950; M.A., Columbia University, 1951; Ph.D., University of Pennsylvania, 1956.

MORETZ Jr., Walter Jennings, Assistant Professor of Education, Director of College Counseling Center. B.A., Lenoir Rhyne College, 1955; B.D., Lutheran Seminary, 1959; Ph.D., Florida State University, 1970.


MUELLER, Anna Maria, *Acting Assistant Professor of Biology*. A.B., Fresno State College, 1954.


O'KEEFFE, Richard Bennett, *Assistant Professor, Assistant Library Director*. B.A., Catholic University of America, 1955; M.S.L.S., Catholic University of America, 1958.

OPPELT, John Andrew, *Associate Professor of Mathematics, Chairman of Department of Mathematics*. A.B., Loyola College, 1959; M.S., University of Notre Dame, 1961; Ph.D., University of Notre Dame, 1965.

PACHECO, Josephine Fennell, *Assistant Professor of History*. B.A., Westhampton College of the University of Richmond, 1941; M.A., University of Chicago, 1943; Ph.D., University of Chicago, 1950.


PAPACONSTANTOPOULOS, Dimitrios Andreas, *Associate Professor of Physics*. B.Sc., University of Athens, 1961; D.I.C., Imperial College
GEORGE MASON UNIVERSITY


PAPP, Zoltan, Associate Professor of Mathematics. Dipl. Math., University of Debrecen, 1958; Dr. rer. nat., University of Debrecen, 1960.


PARKS, Mildred Louise, Instructor in Biology. B.S., University of South Carolina, 1961; M.S., University of South Carolina, 1966.

PENG, Jia-Jeou, Assistant Professor of Psychology. B.S., National Taiwan University, 1963; M.A., Wayne State University, 1967; Ph.D., Wayne State University, 1970.

PHILLIPS Jr., Samuel Hudgins, Associate Professor of Economics. B.A., College of William and Mary, 1958; M.A., University of Virginia, 1960; Ph.D., University of Virginia, 1966.


PUGH, Evelyn Littleton, Associate Professor of History, B.S., East Carolina College, 1952; M.A., Duke University, 1959; Ph.D., American University, 1966.

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GEORGE MASON UNIVERSITY


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GEORGE MASON UNIVERSITY


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Campus Security Chief Louis Law
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*Deceased, December, 1971.
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Index

Academic dismissal, 35
Academic regulations, 30-39
Activities & organizations, 13
Admission requirements, 19-22
application, 19; conditional, 22;
engineering, 21; foreign students, 21;
from another college, 21; from
secondary school, 20; general
requirements, 19
Advanced placement program
by examination, 37; with credit, 37;
without credit, 37
Anthropology, 62
Art, 95
Astronomy, 112
Athletics, 14
awards, 158
Attendance, 32
Audit, 31
Automobiles
See motor vehicles
Awards, 158
Bachelor of Arts degree, 43, 44
Bachelor of Arts in Economics, 114
Bachelor of Arts in Mathematics, 105
Bachelor of Science
in the College of Arts and Sciences,
44; in the College of Professional
Studies (Business Administration,
Education), 46-50: see also subject
listing
Bachelor of Science in Economics, 114
Bachelor of Science in Mathematics, 105
Bachelor of Science in Social Welfare, 57
Behavioral Sciences Department
anthropology, 62; B.S. in Social
Welfare, 57; psychology, 53-57;
sociology, 57-62
Biology Department
courses and major in, 63
Business Administration Department
B.S., 46; courses, 128-131; major, 127
Calendar, 4, 5, 6
Campus Ministry Association, 16
Change of status and address, 17
Change of courses, 32
Checks, 24
Chemistry Department
courses & major, 68
Class standing, 38
College of Arts & Sciences
Bachelor of Arts, 43; Bachelor of
Science, 44; courses, 53-126;
engineering, 45: see departmental
listings
College of Professional Studies
Bachelor of Science (Business
Administration), 46, 47; Bachelor of
Science (Elementary Education), 47,
48; Bachelor of Science (Health &
Physical Education), 49; courses,
127-146: see also departmental listings
Conduct, 16
Correspondence Directory, 7
Counseling Center, 15, 162
Credit and grades, 30
Credit without grade, 31
Credits earned at other colleges, 38
Dean’s List, 39
Deficiencies, 33-36
Degree recipients, 148
Degree requirements
application, 42; general (all degrees),
41, 42; second bachelor’s degree, 42:
see Bachelor of Arts, Bachelor of
Science degrees
Delayed registration, 22
Deposits, 25
Economics
B.A., 114; B.S., 114; courses, 114
Education Department
admission, 132; courses, 136-143;
health, 139; library science, 142;
requirements, 132;
teaching—elementary school, 133;
—physical education, 135; —secondary
school, 133
Engineering
admission, 21; courses, 112; Two-Year
Program, 45
INDEX

English department courses, 71; journalism courses, 77; major, 71; speech courses, 77
Examinations, 33
absence from examinations & special examinations, 33; re-examinations, 33

Fees & expenses
checks, 24; deposits, 25; fee schedule, 23; payment of fees, 24; motor vehicle registration fee, 25; refunds, 24; transcript fee, 25; withholding academic credit, 25

Financial aid, 25-28
emergency loan fund, 28; Federal, 25; loans, 25; scholarships, 27; State, 26

Firearms, 16
Foreign language placement, 36
Foreign Languages Department French courses & major, 78; German courses & major, 81; Portuguese, 83; Russian, 84; Spanish courses & major, 84

Foreign students, 21
French: see foreign languages

General Studies (Department) courses art, 144; English, 144; mathematics, 146; music, 145; regional cultures, 145; speech, 145
Geography courses, 117

George Mason University Academic Regulations, 30; administration & faculty, 161; admission & registration, 19; Advisory Board, 179; campus, 12; degree recipients, 148; facilities, 12; history, 9; location & map, 11; purpose, 8; Rector & Visitors, 160; regulations, 16; staff, 178

George Mason University Foundation, Inc., 179
German courses & major, 81-83
Government & politics courses & major, 118
Grades & grade points, 30
Graduate studies, 42

Health courses, 139
see physical education

History Department courses & major, 88

Honor System, 15
Honors, 39

Humanities Department art, 95; music courses & major, 96; philosophy courses & major, 99; religion, 102

Insurance, 14

Interdisciplinary Programs Latin American studies, 121-124; law enforcement, 124-126

Journalism, 77

Latin American Studies courses, 120, 121-124; degree requirements, 121
Law Enforcement Program, 124-126
Library, Charles Rogers Fenwick, 12, 162
Library Science, 142
Living accommodations, 14
Loans & grants, 26

Major (regulations concerning)
change of major, 39; double major, 39; selection of major, 39

Map, 11

Mathematics Department B.A., 105; B.S., 105; courses, 105
Motor vehicles, 16
registration fee, 25
Music courses and major, 96

Non-academic events & publications, 17

Philosophy courses & major, 99

Physical education B.S. degree, 49; courses, 140-142; teaching, 135

Physics Department astronomy, 112; engineering, 112; physics courses & major, 109

181
GEORGE MASON UNIVERSITY

Placement
advanced placement, 37; credit for, 37; credits earned at other colleges, 38; foreign language placement, 36
Placement Service, 14
Portuguese, 83
Probation & suspension, 33, 34
Psychology courses & major, 53-57
Publications, 17

Readmission
after suspension, 34; after voluntary withdrawal, 36; general, 36
Rector & Visitors, 160
Re-examination, 33
Refunds, 24
Registration, 22-23
classification as a Virginia Student, 23; delayed registration, 22; preregistration, 22; student identity card, 23
Registration, Academic Briefing and Orientation (Calendar), 6
Regulations, 16
Religion courses, 102
Repeating a course, 32
Reports, 32
mid-term progress reports, 32
Residence requirements, 41
Russian, 84

Scholarships, 27
Semester-hour & course load, 31

Social Sciences Department
economics courses, 114-117; economics degree requirements, 114; geography, 117; government & politics courses & major, 118-120; Latin America Seminar, 120
Sociology courses & major, 57-62
see also B.S. in Social Welfare, 57, 58
Solicitors & Salesmen, 17
Spanish courses & major, 88
Speech courses, 77
Student Government Officers, 179
Student identity card, 23
Student services, 14
Summer Session, 42
Effect of attending Summer Session, 35
Suspension, 34
readmission after suspension, 34

Teaching
See Education Department
Transcript Fee, 25

Veterans Affairs, 28
Virginia Student, Classification as, 23

Withdrawal
Enforced, 17; readmission after voluntary withdrawal, 36; voluntary, 35
Withholding Academic Credit, 25