Important Information

It is each student's responsibility to know all the rules, regulations, requirements, and academic policies of George Mason University. If doubt should arise with regard to any matter, it is the further responsibility of the student to consult with a faculty adviser or the dean of the appropriate college.

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

George Mason University is fully accredited by the Southern Association of Colleges and Schools. Also, the University's pre-service elementary education programs are accredited by the National Council for the Accreditation of Teacher Education.

George Mason University is an Equal Employment Opportunity and Affirmative Action institution. The University is committed to the principle that access to study or employment at the University and all benefits, privileges, and opportunities afforded by the University should be accorded each person—student, faculty member, or staff member—according to individual merit and regardless of race, color, religion, sex, or national origin. Furthermore, the University is pledged to the promotion of this principle in every phase of the University's operations and to the procedures necessary to insure adherence to this principle.
Degree Programs

Undergraduate

American Studies BA
Art BA
Biology, BA, BS
Business Administration BS
Chemistry BA, BS
Dramatic Arts BA
Early Childhood Education BS Ed
Economics BA, BS
Elementary Education BS Ed
English BA
European Studies BA
French BA
Geography BA
German BA
Government and Politics BA
Health and Physical Education BS Ed
History BA
Latin American Studies BA
Law Enforcement BS
Mathematics BA, BS
Medical Technology BS
Music BA, BM
Nursing BS
Philosophy BA
Physics BA, BS
Psychology BA
Public Administration BS
Social Welfare BS
Sociology BA
Spanish BA

Graduate

Biology MS
Business Administration MBA
Guidance and Counseling M Ed
Economics MA
Elementary Education M Ed
English MA
History MA, MAT
Mathematics MS
Psychology MA
Reading M Ed
School Administration M Ed
School Supervision M Ed
Secondary Education M Ed
Spanish MA
Special Education M Ed
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## Undergraduate Academic Calendar 1975-76

### First Semester, 1975

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, May 1</td>
<td>Recommended filing date for financial aid applications for 1975-76</td>
</tr>
<tr>
<td>Friday, May 9</td>
<td>Last day for filing winter degree applications in Office of the Registrar</td>
</tr>
<tr>
<td>Saturday, May 24</td>
<td>English proficiency test (9 a.m.)</td>
</tr>
<tr>
<td>Monday, June 2</td>
<td>Early registration for certain newly admitted students (by invitation only)</td>
</tr>
<tr>
<td>Monday, June 16</td>
<td>English proficiency test (9 a.m.)</td>
</tr>
<tr>
<td>Friday, June 27</td>
<td>Last day for students not in continuous registration (Summer Session)</td>
</tr>
<tr>
<td>Tuesday, July 1</td>
<td>Last recommended date for filing admission applications for first semester</td>
</tr>
<tr>
<td>Monday, July 7</td>
<td>English proficiency test (10:00 a.m.)</td>
</tr>
<tr>
<td>Monday, August 18</td>
<td>Tuition and fees due for prebilled students</td>
</tr>
<tr>
<td>Thursday, August 21</td>
<td>Foreign language placement examination (10:00 a.m.); proficiency test (1:00 p.m.)</td>
</tr>
<tr>
<td>Monday, August 25</td>
<td>Welcoming day—orientation programs for new students and new faculty</td>
</tr>
<tr>
<td>Monday, August 25</td>
<td>Registration (for times and priorities see calendar in Schedule of Classes)</td>
</tr>
<tr>
<td>Tuesday, August 28</td>
<td>Recommended filing date for financial aid applications for second semester</td>
</tr>
<tr>
<td>Friday, August 29</td>
<td>Labor Day recess</td>
</tr>
<tr>
<td>Monday, September 8</td>
<td>Last day for adding new courses (except evening: September 16)</td>
</tr>
<tr>
<td>Friday, October 24</td>
<td>Last day for filing spring degree applications in Office of the Registrar</td>
</tr>
<tr>
<td>Monday, November 3</td>
<td>Last day for dropping a course without incurring a grade of &quot;F&quot;; last day for (partial) refund</td>
</tr>
<tr>
<td>Friday, November 7</td>
<td>Patriots' Day—special class schedule</td>
</tr>
<tr>
<td>Friday, November 14</td>
<td>Spring semester Schedule of Classes and registration calendar published</td>
</tr>
<tr>
<td>Monday, November 24</td>
<td>Registration (for times and priorities see calendar in Schedule of Classes)</td>
</tr>
<tr>
<td>Thursday, November 27</td>
<td>Thanksgiving recess</td>
</tr>
<tr>
<td>Monday, December 1</td>
<td>Last recommended date for filing admission applications for second semester</td>
</tr>
<tr>
<td>Monday, December 1</td>
<td>Early registration (for times and priorities see calendar in Schedule of Classes)</td>
</tr>
<tr>
<td>Friday, December 5</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Monday, December 15</td>
<td>Study days</td>
</tr>
<tr>
<td>Tuesday, December 16</td>
<td>Examinations</td>
</tr>
<tr>
<td>Tuesday, December 23</td>
<td>Examinations</td>
</tr>
</tbody>
</table>

### Second Semester, 1976

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, January 8</td>
<td>Tuition and fees due for prebilled students</td>
</tr>
<tr>
<td>Friday, January 9</td>
<td>Foreign language placement examination (10:00 a.m.); proficiency test (1:00 p.m.)</td>
</tr>
<tr>
<td>Monday, January 12</td>
<td>First day of classes</td>
</tr>
<tr>
<td>Tuesday, January 13</td>
<td>Welcoming day; English proficiency test (1:00 p.m.)</td>
</tr>
<tr>
<td>Tuesday, January 13</td>
<td>Registration (for times and priorities see calendar in Schedule of Classes)</td>
</tr>
<tr>
<td>Monday, January 19</td>
<td>First day of classes</td>
</tr>
<tr>
<td>Friday, January 23</td>
<td>Last day for adding new courses (except evening: January 30)</td>
</tr>
<tr>
<td>Friday, February 20</td>
<td>Last day for filing summer degree applications in Office of the Registrar</td>
</tr>
<tr>
<td>Saturday, March 6</td>
<td>Midsemester recess</td>
</tr>
<tr>
<td>Monday, March 19</td>
<td>Last day for filing winter degree applications in Office of the Registrar</td>
</tr>
<tr>
<td>Friday, March 26</td>
<td>Last day for dropping a course without incurring a grade of &quot;F&quot;; last day for (partial) refund</td>
</tr>
<tr>
<td>Friday, April 9</td>
<td>George Mason Day—special class schedule</td>
</tr>
<tr>
<td>Monday, April 12</td>
<td>Fall semester Schedule of Classes and registration calendar published</td>
</tr>
<tr>
<td>Thursday, April 15</td>
<td>Recommended filing date for financial aid applications for summer 1976</td>
</tr>
<tr>
<td>Monday, April 19</td>
<td>Early registration (for times and priorities see calendar in Schedule of Classes)</td>
</tr>
<tr>
<td>Friday, April 23</td>
<td>Last day for filing winter degree applications in Office of the Registrar</td>
</tr>
<tr>
<td>Friday, April 30</td>
<td>Last day of classes; recommended filing date for financial aid applica­tions for 1976-77 session</td>
</tr>
<tr>
<td>Saturday, May 1</td>
<td>Study days</td>
</tr>
<tr>
<td>Monday, May 11</td>
<td>Examinations</td>
</tr>
<tr>
<td>Saturday, May 15</td>
<td>Spring commencement</td>
</tr>
</tbody>
</table>

### Summer Session, 1976

*Wednesday, May 26 and Thursday, May 27* | Registration for first term and eight-week term |
*Tuesday, June 1 through Wednesday, June 30* | First term, except graduate education |
*Monday, June 14 through Wednesday, August 4* | Eight-week term |
*Thursday, June 17 through Monday, July 19* | First term, graduate education only |
*Thursday, July 1* | Registration for second term |
*Tuesday, July 6 through* | Second term, except graduate education |
*Tuesday, July 20 through Thursday, August 12* | Second term, graduate education only |

*These dates are tentative; details and final dates for the Summer Session are published in the Summer Session Catalog which is available in February.*

http://catalog.gmu.edu
A Note on the Photographs

The Federal Theater Project (FTP) came into existence in 1935 as one of five WPA art projects. Designed to provide assistance to thousands of unemployed theatrical people, the project brought theater to thousands—many of whom had never before been able to afford it.

Administered from Washington by Hallie Flanagan through six regional directors, the project was national in scope, regional in emphasis. In its four years of existence, the FTP put on 924 separate productions; of these over 200 were new plays. Others included classics, children's plays, religious dramas, radio plays, musicals and marionette shows.

Over 30 million Americans saw these productions, paying a total of $2 million. Sixty per cent of the programs were free and admissions varied from 5 cents to $1.

In spite of this spectacular success in the middle of a great depression, the Federal Theater was closed by Congress on June 30, 1939, after several months of hearings by the newly formed House Special Committee on Un-American Activities. The sudden termination of the project caused great confusion in the final disposition of the material. Consequently, some research and playscript material was stored in the National Archives and some playscripts remained in the states. The bulk of the FTP material was returned to the Library of Congress.

In the summer of 1974 two members of the English department, Lorraine A. Brown and John S. O'Connor, working with John Y. Cole from the Library of Congress and University President Vergil H. Dykstra, arranged to have the FTP collection placed on permanent loan at the George Mason library. Brown and O'Connor are currently engaged in researching and editing the more than 40,000 pieces from the collection. When the playscripts are sorted and cataloged, the collection will be available for scholars, researchers and the general public.

Federal Theater Project photographs on loan to George Mason University.

1 Bulletin board at the Alcazar Theater, San Francisco, 1938. (Page 5)
2 Back stage at the Lyric Theater, New York City, Date unknown. (Page 7)
3 Sign painters in a California properties shop. City and date unknown. (Page 8)
4 WPA seamstresses. City and date unknown. (Page 9)
5 Jessie Leonard, member of the Federal Theater company on Long Island, buys a poppy from young Miss Nourse in Hempstead Poppy Drive. Hempstead, New York, May 1936. (Page 10)
6 Street facade of the Lyric Theater, New York City, Date unknown. (Page 11)
7 Outdoor production in Central Park, New York City. Date unknown. (Page 13)
8 Promotional photograph for The World We Live In, a Federal Theater production. City and date unknown. (Page 15)
9 Federal Art Project artists start work on a mosaic for the Long Beach, California municipal auditorium. Date unknown. (Page 17)
10 Vandamm Studio of New York promotional photograph for unknown Federal Theater production. City and date unknown. (Page 19)
11 Vandamm Studio photograph. (Page 19)
12 Descriptive caption: Why Mrs. Fletcher? Atlanta Federal Theater Production of The Man in the Tree by John Weidworth which opened on January 31, 1938. Atlanta, Georgia. (Page 21)
13 Los Angeles Federal Theater production of Two A Day. Date unknown. (Page 23)
14 Wood section of a California WPA properties shop. Date and City unknown. (Page 24)
General Information

History of the University

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

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

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

In an attempt to meet the state's long-range mandate, the George Mason College Board of Control, supported by the citizens of Alexandria, Falls Church, Arlington and Fairfax County, worked to acquire 422 additional acres. 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 on Route 50 in Fairfax City and this facility is now known as the North Campus.

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

Mission and Goals

George Mason University

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

http://catalog.gmu.edu
About the University

George Mason University, the state-supported regional university for Northern Virginia, offers a wide range of undergraduate and graduate degree programs at two Fairfax campus locations; courses are also taught at off-campus sites in the region.

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

Since 1964, when the first four academic buildings opened on the Main Campus, expansion has been rapid. Today, the University serves more than 6,000 day and evening students through the College of Arts and Sciences, the College of Professional Studies, and the Graduate School. A Summer Session provides courses for more than 3,400 students.

Although George Mason is Northern Virginia’s regional state university, it serves commuting students from all parts of the Washington area. Over one-third of the student body is more than 25 years of age, and more than three-quarters of the University’s students are employed on either a part-time or full-time basis.

In the development of George Mason’s 576-acre Main Campus, careful attention has been paid to the preservation of the natural beauty of the area. Parking is located on the perimeter of the campus, with buildings surrounded by groves of trees and park-like recreational areas.

Several new buildings have recently been completed, including Clarence Robinson Hall, an addition to the Student Union, and a five-story tower addition to the Charles Rogers Fenwick Library. Clarence Robinson Hall houses a number of academic departments. The library addition is the first of six such modules scheduled to be built at intervals. The fully completed Student Union, a physical education building, library, lecture hall, an administration building, and several modern classroom buildings are situated on the Main Campus.

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

Planning is currently completed for the construction of the second phase of Clarence Robinson Hall. The University is studying plans for a second tower addition to the library, for a second phase of the physical education building, and for a permanent administration building.

Counseling, financial aid, job placement, career planning, and health insurance are among the services available to students. Although the University provides no on-campus housing, its Office of Career Planning, Placement, and Financial Aid can assist students in finding suitable housing in the vicinity. Campus clubs, student publications, student government, and intramural and intercollegiate athletics offer students a variety of activities from which to choose.

Library Services. University library services are provided on both campuses. An open stack arrangement encourages direct access to the collections which number 115,000 volumes and 150,000 microform units. Approximately 1,900 current periodicals are received. The library is a selective depository for United States Government publications. Services available to students and faculty at both campus locations include inter-library loan.

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

Theater Project. The Library of Congress has placed on deposit in the Fenwick Library an archival collection of materials produced by the Federal Theater Project in the 1930’s. The collection contains 40,000 items, including playscripts, radio scripts, research data, set and costume designs, photographs, musical scores, and posters.

Photographs appearing in this catalog are from the Federal Theater Project collection at George Mason.

Academic Programs
College of Arts and Sciences. Various academic programs are available to students at George Mason University. Courses of study in the College of Arts and Sciences leading to the Bachelor of Arts degree are available in biology, chemistry, economics, law enforcement, mathematics, physics, public administration, and social welfare.

The College also offers a Bachelor of Music degree.

At the same time while completing the requirements for a baccalaureate degree within the College of Arts and Sciences, interested students have the option of obtaining teaching certification at the secondary level.

In addition to four-year programs the College offers a two-year engineering program designed to meet most of the basic requirements of the first two years of the standard engineering curriculum.

College of Professional Studies. Majors and degrees possible in the College of Professional Studies are: Bachelor of Science in Business Administration (B.S.); Bachelor of Science in Education (B.S. in Ed.) with majors in early childhood education, elementary education, and health and physical education; Bachelor of Science in Medical Technology; and a Bachelor of Science in Nursing. A program in Fire Service Administration is in the planning stage.

Extended Studies
The University’s Office of Extended Studies performs a number of functions generally associated with continuing and adult education, special programs, and lifelong learning. All of the credit courses and programs offered through the Office of Extended Studies originate in the appropriate college and school of the University, and hence are subject to the official University regulations and procedures.

Evening Session. The Office of Extended Studies coordinates the courses and programs of the College of Arts and Sciences and the College of Professional Studies scheduled after 4:15 p.m. A number of bachelor’s degree programs are completely available in the evening for the part-time student and include majors in business administration, English, history, and psychology. All academic departments offer evening courses, and other undergraduate majors will be added in the evening as the evening session expands.

The Extended Studies Office on each campus maintains evening office hours, Monday through Thursday, for the convenience of evening students. These offices perform many of the daytime functions of the deans’ offices, the admis-
sions office, the registrar's office, the cashier, and the departmental offices during their evening hours of operation. Class schedules and other information on the evening session are available in the **Evening Studies** brochure.

**Extended Studies Enrollment.** Administered by the Office of Extended Studies, this procedure allows persons who do not wish to, need to, or who may not meet regular undergraduate or graduate admissions criteria, to enroll in any on- or off-campus course for which he or she is qualified without seeking admission to the University. Credits earned by students as extended studies enrollees are recorded on regular transcripts.

If a student who has enrolled in courses using this procedure wishes to apply for admission, the regular graduate or undergraduate admission procedures take effect, almost as if the student were applying for transfer. Undergraduate students are limited to 60 hours of credit earned in this capacity as subsequently applicable to a degree, and graduate students to 12.

All on- and off-campus tuition, fees and University regulations affect these students. To qualify for this type of enrollment, a student must be approved for each course enrollment by a professional counselor in the Office of Extended Studies, who will counsel and advise the student about prerequisites and course requirements.

**Off-Campus Credit Courses.** The Office of Extended Studies administers a program of regular undergraduate and graduate credit courses of the colleges and schools of the University at convenient off-campus locations throughout Northern Virginia. Off-campus credit courses are fully applicable to the residence and degree requirements of the University. Students enrolling in off-campus courses are assessed tuition and fee charges at rates independent of those established for on-campus courses. The off-campus schedule of classes is published in the **Evening Studies** brochure each semester.

**Guest Matriculant Enrollment.** All persons enrolled in degree programs at other accredited institutions who wish to take undergraduate courses at the University for credit transfer back to their home institution enroll through the Office of Extended Studies. Such guest matriculants should submit evidence of permission to enroll from the appropriate dean at their home institution to a counselor in the Office of Extended Studies.

**Senior Citizens Enrollment.** The Office of Extended Studies administers the Senior Citizens Higher Education Act of 1974 as applicable to the University. Under the terms of this act, eligible Virginia residents over 65 years-of-age with a taxable income of less than $5,000.00 are entitled to enroll in University courses on a space available basis without paying tuition and fees. The act also provides for audit and for non-credit course enrollment without payment of tuition and fees, and without income limitation. Interested senior citizens should contact the Office of Extended Studies.

**Graduate School**
George Mason University offers a number of master's degree programs through the Graduate School. Information concerning these graduate programs is presented in a separate Graduate School catalog which may be obtained from the Graduate Admissions Office. Graduate programs currently available at the University are biology, business administration, economics, elementary education, English, guidance and counseling, history, mathematics, psychology, reading, school administration, school supervision, secondary education, Spanish, and special education.

**Summer Session**
Information concerning the George Mason University Summer Session is presented in a separate catalog which is available in February from the Office of Admissions.

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

American Minority Cultures
The University provides instruction in many phases of Western and non-Western cultures. It also includes courses in American minority cultures. In addition to the courses in minority studies listed below, the University provides general courses in such subjects as American history and sociology in which a portion of each course is devoted to the place and importance of minority groups in the American culture. Courses in such subjects as music, literature, and religious thought include the contributions of American minorities to the total field. Academic departments seek textbooks which adequately represent the aspirations and contributions of American minorities. The University welcomes students from all minority groups. The following separate courses in minority culture are offered at this time:

Religion 238: Black Religion (3)
Sociology 308: Sociology of Race

Relations and Minorities (3)
English 386: Literature of Black America (3)
History 335: The Afro-American Experience in the United States (3)
History 510: Race in American Life and Thought (3) (May be taken by undergraduates with permission of instructor.)

Minority Affairs
The Office of Minority Affairs, under the direction of the President’s Special Assistant for Minority Affairs, operates a program designed to enhance the service of George Mason University to minority communities. The general objective of the program is to shape the University as an educational environment which reflects and expresses the ethnic and cultural diversity of its context and which addresses the educational needs of all the people of its constituent area. The program is an integrated component of the total program of the University and is designed to affect not only the minority population but every segment of the University in a positive way.

The Minority Affairs Program has three emphases: services to students; to faculty, staff, and administration; and to the University in its relations with minority communities.

Student services are geared to the recruitment, retention, and development of students of minority groups. A special recruitment officer who is a part of the staff of the Admissions Office gives special attention to the recruitment and admission of minority group students. In the Career Planning, Placement, and Financial Aid Office a designated staff member gives attention to special financial problems which students of minority groups encounter and seeks new sources of scholarship for them. Arrangements for close counseling and tutorial assistance are provided for those students who need and desire them. While the Office of Minority Affairs coordinates these services in a unified program, the services are integrated into the administrative units to which they relate.

Services to the faculty, staff, and administration include assistance in carrying out affirmative action mandates, improvement of curriculum, and heightening awareness of minority concerns and issues.

The program also assists the University in improving its relations with, services to, and image in minority communities.

Non-Credit Courses
Non-credit courses, workshops, institutes, and programs offered by the University are coordinated or administered through the Office of Extended Studies to serve a variety of public and community needs such as personal enrichment, professional advancement, or recreation. Course offerings, schedules, and fees are available in a non-credit brochure.

Other non-credit courses, workshops, and institutes of a more specialized nature are offered at the request of governmental, industrial, business, and professional groups to meet in-service training needs. The University seeks to make its resources available to the community through the Office of Extended Studies.
Student Activities and Services

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

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

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

Student Organizations. Student publications, student government, intercollegiate and intramural athletics, and numerous campus clubs provide opportunities for students to exercise the full scope of their talents. There are approximately 40 student organizations on campus spanning a broad range of interests: political, forensic, dramatic, musical, journalistic, scientific, recreational, business, social, religious, and fellowship. Participation in student activities is limited to bonafide registered students.

Athletics. The intercollegiate athletic program offers competition between the University and colleges in Virginia, and other states on the East Coast. Men's intercollegiate competition includes 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.

The University participates in the Mason-Dixon Intercollegiate Athletic Conference. Competition outside of conference play is furnished by American University, University of Virginia, University of Richmond, Georgetown University, George Washington University, U.S. Naval Academy and others.

The women's intercollegiate athletic program is conducted in basketball, volleyball and tennis. The University participates in the Metropolitan Intercollegiate Sports Association for Women competing against Georgetown, Immaculata College, Gallaudet College, American University, Catholic University and others.

The intramural program enables students to participate in sports of their own choosing.

Facilities are available for tennis, basketball, volleyball, flag-football, trap and skeet, cross-country, table tennis, badminton and softball.

The Athletic Council has general supervision over the men's intercollegiate athletic program, the women's intercollegiate athletic program and the intramural program.

Student Union. Most non-academic activities and programs at the University take place in the Student Union which was completed in Spring, 1975. The Offices of Student Government, Dean for Student Services, Director of the Student Union and Activities, as well as those of Career Planning, Placement, and Financial Aid, Counseling Center, Veterans Affairs, Student Publications, Student Organizations, Campus Ministry, and Honor Committee are located in the building.

The Union houses recreational facilities such as an Arts and Crafts Center, game, TV, music, and card rooms and lounge areas; the Campus Bookstore and the United Virginia Bank also provide services in the Union. A snack bar, cafeteria, and rathskeller are on the lower level, with patios on both the north and south sides of the building. The Union also has varied facilities to accommodate meetings.

Counseling and Psychological Services. The University Counseling and Psychological Services 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 and counselor. Appointments are recommended.

Career Planning and Placement. The Office of Career Planning, Placement, and Financial Aid assists students in developing career plans and obtaining full time employment upon leaving the University. The major services offered by the office include: (1) job referrals; (2) individual and group counseling on vocational decision-making and job hunting skills; (3) an extensive occupational and graduate school library; (4) employer recruitment program; (5) special career seminars, job fairs; (6) permanent credential files which can be made available to prospective employers.

These services are also available to alumni on a continuing basis.

Part-time and summer employment information is made available to students through listings posted on a bulletin board in the Student Union by the Placement Office. Referrals are made after consultation with a placement interviewer. An effort is made to assist students in obtaining employment that will provide experience in the students' study areas.

Veterans Affairs. The University maintains an Office of Veterans Affairs to
assist veterans, servicemen, their dependents and survivors in obtaining authorized educational benefits. The office also provides support to veterans in adjusting to the exigencies of University life.

To assist in problems which may arise with the Veterans Administration, there is a VA representative available in the office.

Veterans make application to receive benefits for the first time or to change their place of training from another institution to George Mason University. Early contact is advised for all eligible persons seeking entrance to the University to expedite advance payment.

For undergraduate students registered in the regular session eligibility for full time institutional training consists of 12 semester hours, three-quarter time consists of nine to 11 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, comprehensive fee and building fee. Payments for attendance at Summer Sessions are determined on the basis of an accelerated program. A Veterans Administration Education Loan program provides funds for loans for eligible veterans demonstrating need.

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 Student Union.

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

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

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

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

Entering students participate in an orientation given by the Honor Committee. A statement of willingness to conform to and uphold the Honor System is included in the application form for admission to the University.
Housing. The Placement Office in the Student Union provides assistance in locating suitable housing in the vicinity of the University for students living away from home. The University provides no housing facilities of its own at present.

Insurance. The 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 the University. This policy provides twenty-four hour coverage including vacation periods. Applications and brochures are available in the Office of the Dean for Student Services.

Financial Aid
The University has a limited amount of financial aid available; it is administered by the Office of Career Planning, Placement, and Financial Aid. The assistance consists of scholarships, grants, loans, and employment. Financial aid awards are based primarily upon financial need and secondarily upon scholarship.

New and currently enrolled students should obtain an application for financial aid from the Office of Career Planning, Placement, and Financial Aid as soon as possible. In addition, a "Parents' Confidential Statement" or "Student's Financial Statement" in support of the application for financial aid must be filed with the College Scholarship Service. Students may consult with a member of the office staff for financial aid counseling and further information. The following submission dates are suggested for financial aid applications:

- 1975-76 Session: May 1, 1975
- Summer 1975: April 15, 1975
- 1976-77 Session: May 1, 1976

Federal Programs. The University participates in federally-supported programs of student financial aid. The following programs are available to eligible students:

- The National Direct Student Loan Program. The University makes available to qualified students long term, low interest loans from the federally-sponsored National Direct 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.

- Supplemental 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. To receive this grant, a matching scholarship or loan must be awarded to the student.

- The College Work-Study Program. Limited funds are available 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 a Work-Study job placement.

- The Basic Educational Opportunity Grant Program. This program makes funds available to students attending eligible post-high school institutions, according to the student's eligibility as established by his application made directly to HEW. Full-time students who did not attend a post-secondary school prior to April 1, 1973 may apply.

- Law Enforcement Education Program. The Law Enforcement Education Program provides financial assistance to allow criminal justice personnel to continue their education at the college and university level. Grants of up to $400 per semester and loans of up to $2,200 per academic year are offered to students who qualify under the current LEEP guidelines.

- Federal Nursing Program. The University participates in the Federal Nursing Loan Program for students planning a career in the field of nursing. The maximum Nursing Student Loan available to an individual borrower in an academic year or its equivalent may not exceed $2,500, or the amount of the student's financial need, whichever is the lesser. Cancellation of the loan is permitted under certain conditions.

- State Loans and Grants. The state of Virginia makes available financial assistance to 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.

- Virginia Scholarships. These scholarships are for students who demonstrate financial eligibility and have established a record of academic and personal achievement.

- The Virginia College Scholarship Assistance Program. This is a student incentive grant program, using both federal and state funds, geared to the student's financial need. For academic year 1975-76, full-time students who are legal residents of Virginia, and who are freshmen, sophomores, or juniors may apply.

State Teachers Scholarship/Loans. These scholarships are loans in the amount of $450.00 per year which are cancelled at a fixed rate for each year of teaching in Virginia schools after graduation. Applicants must be Virginia residents, full-time undergraduate students, and meet the qualifications set by the State Board of Education. Application forms are available in the Office of Career Planning, Placement, and Financial Aid, and should be returned during the spring semester for the following academic year.

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

Veterans Administration Education Loan. This program provides funds for loans to eligible veterans demonstrating need.

Emergency Loan Fund. Short-term, interest-free loans are available to students through the Office of Career Planning, Placement, and Financial Aid.
Vehicles must be registered with the Department of Security. At time of registration the student must certify that (a) the vehicle has a valid state registration and valid insurance from a recognized insurance company evidencing coverage for public liability in conformance with the laws of the Commonwealth of Virginia; (b) the student has a valid state driver’s license, and (c) the student understands that he or she will be governed by University Motor Vehicle and Traffic Rules and Regulations, a copy of which will be furnished at time of registration of vehicle. A fee of $1.00 will be charged for the first vehicle registered by the student. After the initial vehicle registration, the student may register two additional (family) vehicles without charge. Every registered vehicle shall display in full view the University’s vehicular registration decal, which shall be affixed immediately upon issuance to the left half of the rear bumper. The decal is valid for the period September 1 - August 31 of the specified year.

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

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

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

Scheduling Non-Academic Events
Organizations or groups of students wishing to use University facilities for non-academic matters must obtain approval of the Dean for Student Services. Each request must indicate the name of the organization, the type of event for which facility use is intended, and be registered in advance with the Office of the Dean for Student Services.
Admission to the University

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 July 1 for fall admission and December 1 for spring admission. 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 Office of Admissions. Admission is contingent upon satisfactory completion of the requirements discussed in this section and successful completion of the senior year of high school. Enrollment in the Summer Session does not constitute admission to a regular (fall-spring) semester.

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 mathematic processes.
2. Complete record from an accredited secondary or preparatory school with graduation based on 15 or more years of study and satisfactory experience in the English, mathematics, science, foreign language, and social studies.
3. Satisfactory scores on the Scholastic Aptitude Test given by the College Entrance Examination Board or equivalent examination.
4. Senior class rank (should be in the upper sixty percent).

These criteria and those which follow are applied flexibly to assure that people with unusual qualifications are not denied admission. Such people should seek a personal interview. Otherwise, personal interviews and recommendations are not required unless requested by the Director of Admissions.

Candidates who are approved for September admission must notify the University 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 the applicant fails to satisfy all requirements prior to the closing of spring or fall registration.

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

Admission from Secondary School Programs other than Engineering. For admission to programs other than engineering, an applicant must take the Scholastic Aptitude Test given by the College Entrance Examination Board and must present not fewer than 15 units of high school work, usually in the following academic 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>3</td>
</tr>
<tr>
<td>Foreign Language</td>
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<tr>
<td>Social Studies</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science—Biology, Chemistry, or Physics</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td>Minimum Total</td>
<td>15</td>
</tr>
</tbody>
</table>

Two-Year Engineering Program. For admission as a student in the two-year engineering program, an applicant must take the Scholastic Aptitude Test given...
by the College Entrance Examination Board and must present 16 units from high school usually in the following fields:

- English ................ 4 units
- Mathematics ............... 3-1/2 units
- History .................. 1 unit
- Science ................... 2 units
- Electives ................ 5-1/2 units

Because the experience of the University has shown that certain subjects are more useful to the engineering student, their inclusion in the high school programs of applicants is strongly recommended, although not required. 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
The 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 ordinarily be required. Students transferring from vocational programs or non-accredited institutions normally will be expected to meet the University's requirements governing initial admission from high school.

Application for admission may be considered if the transfer student:
1. is not presently on social or academic probation at another institution,
2. generally has an average of at least "C" in the institution from which he wishes to transfer,
3. has not been suspended or dropped from another institution.

Transfer students should note the requirements shown under the heading "Credits Earned at Other Colleges."

Foreign Students
Applications are considered from students who are not United States citizens under the following conditions:

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: (1) complete a full program of course work (12-17 credit hours) during the first semester of attendance and maintain an overall "C" /2,000 average, if they are full-time students; or (2) must maintain the same average in 12 credit hours through two consecutive semesters, if they are part-time students. A student who fails to fulfill the prescribed conditions will not be permitted to re-enroll but may petition for readmission after a lapse of two calendar years.

Admission Advisory Committee
The University maintains a faculty committee to review admission decisions and appeals.

Other Stipulations
The Admissions Office or the Admissions Advisory Committee may make other stipulations or recommendations regarding the admission of an individual.

Extended Studies Enrollment
Extended Studies Enrollment (see, Extended Studies) allows individual students who may not meet regular undergraduate or graduate admissions criteria, or for whom these criteria are inappropriate, to enroll in any on- or off-campus course(s) for which they are qualified without seeking admission to the University. Although extended studies enrollees may apply for regular admission at any time, any extended studies enrollee who maintains at least a "C" average for 15 semester hours is eligible for admission.

1 Or equivalent examination.
2 These units must be selected from Algebra I, Algebra II, geometry, trigonometry, probability, and elementary calculus.
3 No credit is allowed for fewer than two units in one foreign language.
4 These units must be two of algebra, one of plane geometry and ½ unit of advanced mathematics—trigonometry, solid geometry, or advanced algebra.
5 Chemistry and physics are recommended.
6 Not more than four units of vocational subjects relevant to engineering will be accepted.
Tuition and Fees

Payment of Tuition and Fees. Tuition and fees for prebilled students are due and payable at the Business Office on or before August 18, 1975 and January 8, 1976. No student is permitted to register for classes until satisfactory financial arrangements have been made with the Business Office (Cashier) including payment of all previous financial obligations still outstanding.

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

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. Students using the deferred plan must come to the Cashier’s Office to make the initial payment and sign a deferred payment contract. Bills for installment payments will not be prepared. It is the student’s responsibility to ensure payments of his installments on or before the due dates published.

Failure to make any tuition payment on or before the due date results in a late charge of $5.00 per day, up to three days. Students who have not made payment within three days following the due date will be placed on financial probation for a period of 10 calendar days. If satisfactory arrangements have not been completed by the end of the probationary period, the student will be suspended for the remainder of the semester.


How to Figure Your Semester On-Campus Tuition & Fee Costs

<table>
<thead>
<tr>
<th>Hours</th>
<th>Tuition</th>
<th>Comp. Fee</th>
<th>Building Fee</th>
<th>Per Semester Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 @ 27.00</td>
<td>$81.00</td>
<td>+</td>
<td>15.00</td>
<td>+</td>
</tr>
<tr>
<td>4 @ 27.00</td>
<td>$108.00</td>
<td>+</td>
<td>15.00</td>
<td>+</td>
</tr>
<tr>
<td>5 @ 27.00</td>
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</tr>
<tr>
<td>6 @ 27.00</td>
<td>$162.00</td>
<td>+</td>
<td>15.00</td>
<td>+</td>
</tr>
<tr>
<td>7 @ 27.00</td>
<td>$189.00</td>
<td>+</td>
<td>30.00</td>
<td>+</td>
</tr>
<tr>
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</tr>
<tr>
<td>Full Time</td>
<td>$315.00</td>
<td>+</td>
<td>30.00</td>
<td>+</td>
</tr>
</tbody>
</table>

| Out-of-State |
| 3 @ 57.00 | $171.00 | + | 15.00 | + | 12.50 |
| 4 @ 57.00 | $228.00 | + | 15.00 | + | 12.50 |
| 5 @ 57.00 | $285.00 | + | 15.00 | + | 12.50 |
| 6 @ 57.00 | $342.00 | + | 15.00 | + | 12.50 |
| 7 @ 57.00 | $399.00 | + | 30.00 | + | 25.00 |
| 8 @ 57.00 | $456.00 | + | 30.00 | + | 25.00 |
| 9 @ 57.00 | $513.00 | + | 30.00 | + | 25.00 |
| 10 @ 57.00 | $570.00 | + | 30.00 | + | 25.00 |
| 11 @ 57.00 | $627.00 | + | 30.00 | + | 25.00 |
| Full Time | $675.00 | + | 30.00 | + | 25.00 |

Tuition and Fees

Application Fee ............................................... $ 10.00
Tuition, Full-time (12 or more semester-hours) per semester .......................... 315.00
Tuition, Part-time (11 semester-hours or less) per semester, per hour ............... 27.00
Comprehensive Fee (7 hours or more) per semester ......................................... 30.00(a)
Building Fee, per semester ................................................................................ 25.00(a)
Laboratory Breakage Deposit .............................................................................. 5.00(b)
Diploma Fee (Seniors Only) .................................................................................. 5.00
Special Registration Fee ........................................................................................ 15.00(c)
Private Instruction (Music; Acting & Directing) ................................................. (d)

(a) Students enrolled for six semester-hours or less are required to pay one-half of the Comprehensive and Building Fees.
(b) Chemistry only. Same Laboratory card may be used for both semesters.
(c) See Application for Degrees.
(d) $105.00, Music: 14 one-half hour lessons; Acting and Directing: 14 one-hour lessons. Fee is non-refundable after 30 calendar days. Refund prior to completion of 30 days is $75.00. A deferred-payment plan is available.

http://catalog.gmu.edu
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.

Failure to Meet Financial Obligations. Students will not be permitted to register in the next semester; transcripts of record and diplomas will be withheld from students and former students who have failed to meet their official financial obligations. These obligations include traffic and library fines, and student emergency loans.

Refunds. A student withdrawing within five week days following the first day of classes shall have tuition and fees refunded in full; however, $10.00 will be withheld to cover the administrative costs.

Tuition only will be refunded on a graduated scale for subsequent voluntary withdrawals only through the last day for dropping a course. The refund scale will be posted on bulletin boards and at the Cashier’s Office. It is the student’s responsibility to be familiar with the graduated refund scale.

Off-Campus. Students enrolling in off-campus courses are assessed tuition and fee charges at rates independent of those established for on-campus courses.

Other Required Fees

Deposits. Each student enrolled in a laboratory course (Chemistry) is required to purchase from the Cashier at the time of registration one laboratory card priced at $5.00. This is intended to cover breakage or loss of equipment by the student. As such loss(es) occur, the card is “punched” for the cost of the item in question. Unused portions of the card will be redeemed upon presentation to the Cashier at the end of the second semester (but no later than June 30, 1976).

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

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

Eligibility for In-State Tuition

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

A minor (under 18 years-of-age) is presumed to take the domicile of his father or legal guardian. If his parents are legally separated or divorced and the mother has legal custody, the domicile of the child is presumed to be that of his mother.

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

It is each student's responsibility to know all the rules, regulations, requirements, and academic policies of George Mason University. If doubt should arise with regard to any matter, it is the further responsibility of the student to consult with a faculty adviser or the dean of his college.

Credit and Grades

University course work is measured in terms of quantity and quality.

Semester-Hour. A semester-hour normally represents one hour per week of lecture recitation or not less than two hours per week of laboratory work throughout a semester. Using the semester-hour as the unit of credit, the number of semester hours is a measure of quantity.

A-B-C-D-F. The grade is a measure of quality. The University recognizes four passing grades: "A," "B," "C," and "D." Grade "F" signifies that the work was failed. Academic achievement of a student in a course is generally rated as follows: "A" (excellent), "B" (good), "C" (satisfactory), "D" (poor), and "F" (failure).

A-B-C-No Credit. Beginning with the fall, 1975/76 semester a student successfully completing English Composition and Introduction to Literature (101-102) will be graded either "A," "B," or "C"; a student who does not attain a level of at least a "C" in these courses will receive "No Credit" (NC). A student must attain a minimum grade of "C" in order to have these courses fulfill degree requirements.

Incomplete. In instances in which a student otherwise passing a course is for some cause, beyond reasonable control, unable to complete the work of the course on schedule, the instructor may assign a temporary grade of "IN" (Incomplete).

An "IN" grade must be converted to a passing grade by the end of the drop period of the semester following the one in which the incomplete grade is given, otherwise the Incomplete will be automatically changed to "F." Under unusual circumstances, an exception may be granted beyond this time if a written plan to complete the work has been approved by both the instructor and department chairman and submitted to the dean of the college in which the course is taught for his approval within the first two weeks of the semester following the one in which the incomplete was given. This plan must clearly indicate the date of the completion of all required work and in no case may this date be beyond the end of the regular semester within which the course is next offered.

Credit Without Grade. Each student who is a candidate for a degree at the University, having earned a minimum of 54 semester-hours and being in good academic standing, may during his total remaining program elect to take not more than two one-semester courses for credit 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. For enrollment in a course under this provision, a student must meet the stated prerequisites and secure in advance of enrollment permission of the instructor.

Permission Request Forms are available at the Office of the Registrar. 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 ("P"). A student who is majoring in the field will be given enrollment priority over students enrolling 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.

AB and SP. A student who has received an excuse from the dean of his college to be absent from a 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 appropriate college, or by his designated representative, to a student faced with a delinquency because of very special circumstances such as a major illness.

Audit. Auditing a course requires the permission of the chairman of the department in which the course is offered. This permission should be secured in advance of enrollment. A student may not change from credit to audit status after the Add period. A previously audited course may not be taken for credit at a later date. However, a student may audit a course previously taken and passed. The usual University fees apply to audit status.

Grade Point Average. 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 four for "A," three for "B," two for "C," one for "D," and zero 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) earns 12 grade points. The grade point average is computed by dividing the number of grade points earned at George Mason University by the number of semester-hours attempted.

"P," "NC," "SP," "Audit" and Withdrew Passing do not affect the grade point average. "AB," "IN," and Withdraw Failing have the same effect as "F."

Semester Excluded from GPA. An undergraduate student who has been on academic probation or suspension at George Mason University may petition the registrar to have one semester of his George Mason work excluded from all future computation of his cumulative grade point average. In order for the petition to be approved the student must attain a minimum of a 2.500 grade point average for the first twenty-four credit hours earned immediately following the semester to be excluded.

Classification of Students. Classification of students is determined by class standing as follows: sophomore, 24 semester-hours; junior, 54 semester-hours; senior, 84 semester-hours.

Grade Reports. Reports are sent at the end of each semester to the parent or guardian of each student unless the student is over 18 years of-age or married, in which case the reports are sent directly to the student.
Placement, Proficiency, and Transfer

All entering freshmen who intend to continue a foreign language studied in high school are required to take a foreign language placement test. These tests will be administered to students entering in 1975-76 on Saturday, May 24, Monday, July 7, Thursday, August 21, 1975 and Monday, January 12, 1976. Students who intend to take the placement test must register no later than four weeks in advance with the Department of Foreign Languages by calling 323-2231.

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

(1) The 151, 152 course is designed primarily for students who present less than two high school entrance credits in the language;

(2) Students who present two or more entrance credits in a language and who wish to continue that language will be placed in 151, 152, 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 and receive four semester hours of credit for this achievement;

(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 have to take the placement test. The lowest-level course such students may take for credit is the one immediately beyond the course for which they received transfer credit. They may take the placement test, however, in order to ascertain whether they first need to audit a lower-level course.

All students are urged to complete elementary and intermediate foreign language courses in immediate succession, for example: first semester, 151; second semester, 152; third semester, 251; or first semester, 153; second semester, 251.

Advanced Placement Program with Credit. First semester freshmen entering the University who have completed advanced level courses in secondary schools and who have passed College Board Placement Examinations with scores of five, four or three, may enroll for those higher level courses for which the department concerned determines them to be qualified. Those who have ratings of five or four will be granted up to a maximum of 30 hours credit (without grades). Those who have ratings of three may be granted up to 30 hours credit (without grades) upon recommendation of the department concerned and with the approval of the dean of the appropriate college, but the total number of hours granted may not in any instance exceed 30. 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.

Proficiency and Advanced Placement Examinations—Credit by Examination. Proficiency examinations are offered in a number of courses normally taken during the first two years. Examinations in English, government, geography, mathematics, and foreign languages will usually be announced by the appropriate departments. The foreign language placement test 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 30 semester-hours of undergraduate credit for other courses in the George Mason University curriculum. Credit is recorded for grades of "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 30 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 conform to University policies, evaluate the competence of students, and afford a reliable basis for assigning students to more advanced courses. Credit by Examination forms are available in the office of the student’s academic dean.
College Level Examination Program (CLEP). The University currently does not recognize credits earned by CLEP General Examinations. As part of the Credit by Examination process, certain departments may utilize CLEP Subject Examination scores for total or partial credit in certain courses. Consult the individual department. The University Counseling and Psychological Services Center is a certified CLEP Administration Center.

Transfer Credit. A student transferring into the University 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 the appropriate college. It is the responsibility of the student to see that the Office of the Registrar receives an official transcript of work taken elsewhere before the record can be credited.

Credit Earned at Other Colleges. The credits of students transferring from other institutions will be tentatively evaluated upon admission. 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 the University. 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 one or more junior or community colleges. A maximum of six semester-hours may be transferred from correspondence courses sponsored by regionally accredited institutions. Military services courses represent special cases and generally no credit is given.

Credit To Be Earned at Other Colleges. Permission to take courses at other colleges and universities, at extension centers, and by correspondence must be approved in advance by the dean of the appropriate college or his designated representative.

A student who expects to take summer courses at another institution and to transfer credit to the University must submit a request to the dean of the appropriate George Mason University college by May 15. Catalog numbers and descriptions of courses shall be submitted with the request.

Study Abroad. The University encourages students to broaden and enrich their undergraduate education through approved programs of study abroad for a summer session, a semester, or a full academic year. Many programs exist for formal study within the arts and sciences at accredited foreign institutions. They offer students the advantages of foreign travel, diverse social and cultural experiences, and often the opportunity to live with a family native to the country selected.

Students desiring to study in Latin America are requested to contact Professor Frank MacD. Spindler, chairman, Latin American Studies Committee, in the Department of History. Those interested in study in other parts of the world should contact Professor Esther N. Elstun, chairman, Department of Foreign Languages. In either case, students will be assisted in selecting a program that corresponds to their educational needs and interests. The program selected must be approved by the department chairman supervising the student's major field, and by the appropriate college dean or the dean's designated representative.

Graduate Course Enrollment. An undergraduate student with the permission of his adviser, the chairman of the department offering the courses, the course instructor, and the Dean of the Graduate School may be permitted to enroll in graduate course work for grade, and, if successful, apply the credit gained toward an undergraduate degree. The student should consult with the chairman of the department for identification of graduate course work which can be taken for undergraduate credit.

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

1. All hours attempted are to count in computation of the student's cumulative grade point average.

2. A transcript will show both the original and repeat grades and the respective grade points.

3. Only one grade with appropriate grade points may be presented on the degree application.

Registering in Courses

The Faculty Adviser. In consultation with a faculty adviser, each degree student should plan an academic program to meet the general degree requirements and the specific requirements within a major field. The role of the faculty adviser is to help a student in the planning of an academic program. It must be emphasized, however, that the responsibility for reading the catalog and knowing the requirements of a specific baccalaureate degree rests with the student.

Academic Load. Although the University appreciates the need of many students to assume employment in order to meet their living expenses, employment must not take priority over academic responsibilities. Accordingly, a student who is employed more than 20 hours a week is strongly urged not to attempt a full-time academic load. A student employed more than 40 hours a week should 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 employment. Although 12 semester-hours per semester represents a minimum full-time load, a student who wishes to graduate in a four-year period will need to carry an average of at least 15 semester-hours per semester. A load in excess of 17 hours must be approved by the student's academic dean or his representative.
Early Registration. Early registration is conducted near the end of each semester for those students currently enrolled who intend to return for the next semester. Moreover, newly admitted or readmitted students whose acceptance is accomplished soon enough are permitted to early register.

Registration. New and returning students are given written instructions for the registration procedure in the Schedules of Classes. Students are responsible for following and completing the process properly. Students should confirm the correctness of their enrollment in classes with their instructors and report any apparent error immediately to the Office of the Registrar.

Delayed Registration. A student failing to register during the time specified will not be allowed to enroll without an explanation satisfactory to the student's academic dean. If permission for late registration is granted, the student may be charged a delayed-registration fee of $5.00–$15.00.

Cancelling Registration. Students who are unable to attend a semester for which they have registered should cancel their registration by written notice to the Office of the Registrar. Early cancellations will allow the University to meet the needs of other students wishing to register.

Student Identity Card. As a part of the registration process, each student is issued an identity card. The 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 each semester.

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

Change of Courses. In order to drop and/or add a course, a student must first obtain the written approval of the department in which the dropped or added course is taken. Forms for this purpose may be obtained from the departmental secretaries. All of the required signatures must be obtained on or before the deadlines shown in the Calendar.
Add. The last day for adding courses is no later than seven calendar days after and including the first day of classes.

Drop. The last day to drop a course without incurring an "F" is nine weeks after and including the first day of classes. Subsequent to this time, a student who discontinues a course without permission of the dean of his college will receive a grade of "F" in the course.

Attendance. Students are expected to attend the class periods of the courses for which they register. 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 the course may warrant.

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 student's academic dean. Final re-examinations are not permitted.

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 student's academic dean. If such absence is unexcused or the examination not taken within ten days, the grade on the course is entered as "F." A student whose absence from an examination is excused may take a special examination within the 10-day period on a date to be arranged between student and instructor.

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 14 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.

Academic Standing
Satisfactory Standing. A student with a cumulative grade point average of at least 2.000 for all work attempted is in satisfactory academic standing. In order to hold elective or appointive office in any organization or activity associated with the University a student must maintain satisfactory academic standing.

Probation. Probation is an official warning to the student of failure to make satisfactory progress towards a degree. A student will be placed on probation when he has a grade point deficiency of 13 points below satisfactory standing (2,000); the academic record of a student placed on probation is stamped "probation." A student on probation is ineligible to participate in any athletic or other activity representing the University either on an intercollegiate or club level, and/or to serve as a working member of any student organization. It is the responsibility of the individual student to notify his organization when he becomes ineligible. The student's academic dean, however, has the authority to remove the restriction on activities in whole, or in part.

Suspension. Suspension is enforced withdrawal from the University. No student will be suspended at the end of a semester in which his grade point average for the semester is 2,000 or higher. Suspension is imposed after a semester which shows at
least one of the two following conditions to be true of a student's record:

1. A cumulative grade point deficiency of 25 points below satisfactory standing (2.000).
2. Three semesters of consecutive probation; the three semesters of consecutive probation are extended to four if the student attempted fewer than 12 hours of work each semester.

No course credits earned by a student during the period of suspension from George Mason University will be accepted for the degree program.

**Effect of Attending Summer Session.** The student's academic status shall not change as a result of 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 the case of a student's 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.

**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 appropriate 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 demonstrates that his circumstances have so changed as to make likely the successful continuation of his college program.

3. A student who has been re-admitted under either of these procedures will be restricted in University activities as if he were on probation.

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.

**Voluntary Withdrawal from the University.** An official application form to withdraw must be obtained from the Office of the Registrar, and must be approved in writing by the student's academic dean. A student under eighteen years of age must have parental approval for such withdrawal. To clear the student's record, the application must then be endorsed by the 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 submitted to the Office of the Registrar.

When a student withdraws after the last day for dropping a class, each of his instructors is asked to indicate whether the student withdrew passing or withdrew failing. The student’s permanent record is marked accordingly. All courses that are marked withdrew failing will be figured into the total hours attempted. (See Grades and Grade Point Average).

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 appropriate college to attend the Summer Session and complete satisfactorily a prescribed number of approved courses. His re-admission 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 Office of Admissions 60 days in advance of registration for readmission.

The 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 a major should obtain the necessary form from his faculty adviser. In general, no student under academic sanction at George Mason University may transfer from one college within the University to another. Appeals for exception to this rule can be made to the dean of the college to which the student wishes to transfer. Prior to seeking a change of major, the student should become thoroughly acquainted with minimum requirements in the new department.

Double Major. A student who desires to graduate from the 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.

The applicant should present to the chairmen of the departments involved a program showing in detail the curriculum he or she will pursue to graduation. This program must be approved by the department chairmen involved and by the dean of the appropriate college. The department chairmen 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.

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 30 semester-hours of credit earned at George Mason University not presented toward the first degree.

Graduation
Catalog Requirements for Graduation. A candidate for a degree may elect to graduate under the provisions of the catalog under which he was admitted or may elect to graduate under the provisions of a catalog subsequent to admission 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.

Residence Requirements. At least one-fourth of the total semester-hours presented on the degree application must be completed at George Mason University; these shall include at least 12 semester-hours of advanced-level courses in the major program. Moreover, except that with special permission of the dean of the appropriate college, the student's final one-fourth of his college study must be completed at George Mason University.

Academic Achievement. To qualify for a baccalaureate degree, a student must have been admitted, and must have fulfilled all stated requirements for the specific degree. In addition, the student 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 in each college considers appeals in writing from students who may be two quality grade points and/or one semester-hour short of meeting degree requirements, considers written appeals from students who have lost credit in transferring from a quarter-system, and considers written appeals from students who have failed to meet certain area requirements.

Application for Degree
Students who expect to complete graduation degree requirements must secure an Application for Degree form from the Registrar’s office, complete, and return it to the Office of the Registrar by the date designated on the University Calendar. There is a $5.00 diploma fee which is payable at the time the student submits the Application for Degree. A $5.00 fee is required each time a new application for graduation is submitted.

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

Any student not in attendance at the 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.

Graduation with Distinction. The University will recognize as graduating with distinction a student who has a grade point average of 3.300, with high distinction a student who has a grade point average of 3.600, and with highest distinction a student who has a grade point average of 3.800. Such recognition shall be limited to students who have earned 60 hours or more at George Mason University. (This distinction shall appear on the graduation program and on the student's transcript.) These grade point averages become effective with the January 1977 graduation.

Commencement. Commencement exercises provide an opportunity for students and their families to share in the experience of the conferral of academic degrees. This ceremony represents the culmination of a phase in the formal education of the individual. Degree candidates who do not desire to participate in the formal graduation ceremonies must notify the Office of the Registrar at least 24 hours prior to the date and time of the ceremony.
## Bachelor of Arts Degree Requirements

**Semester Hours**

<table>
<thead>
<tr>
<th>I. Arts and Literature ........................................ 12-30</th>
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</thead>
<tbody>
<tr>
<td>a. English Composition (6)</td>
</tr>
<tr>
<td>A student must attain a minimum grade of &quot;C&quot; in order to have English 101-102 fulfill degree requirements.</td>
</tr>
<tr>
<td>b. Literature (6)</td>
</tr>
<tr>
<td>This requirement is met by taking two of the one-semester English 200 literature courses.</td>
</tr>
<tr>
<td>c. Art, Dance, Music, Philosophy, Religion (6)</td>
</tr>
<tr>
<td>Sight Singing and Ear Training, Harmony, Musical Ensembles, Class Instruments/Voice, Private Music Instruction, art studio courses, and dance studio courses may not be used to meet this requirement.</td>
</tr>
<tr>
<td>d. Foreign Languages (0-12)</td>
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<tr>
<td>The student must demonstrate proficiency in one foreign language through the intermediate level, either by examination or by completion of course work.</td>
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<tr>
<th>II. Social and Behavioral Sciences ............................ 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six semester hours are required from each of the following groups:</td>
</tr>
<tr>
<td>Social Sciences: Economics, geography (101, 103, 301, 302), government, history,</td>
</tr>
<tr>
<td>Behavioral Sciences: Anthropology, psychology, sociology.</td>
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</tbody>
</table>

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<tr>
<th>III. Mathematics and Natural Sciences ............................ 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics, geography (102, 206), geology, physics, astronomy, biology, and/or chemistry courses can be used. 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.</td>
</tr>
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<tr>
<th>IV. Non-Western Culture ........................................ 6</th>
</tr>
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<tbody>
<tr>
<td>Six credits must be earned in courses devoted to Non-Western Culture. This requirement is waived for a student who has attended for more than four years an indigenous school in a non-Western country. The following courses are designated as meeting this requirement:</td>
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<tr>
<th>V. Major .................................................... 30-42</th>
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<tbody>
<tr>
<td>See appropriate departmental sections of the catalog for required credits. At least 12 hours of work in the major field at the 300 and 400 level must be completed at George Mason University.</td>
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</table>

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<thead>
<tr>
<th>VI. Total Minimum Semester-Hours ............................. 120</th>
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</table>
Bachelor of Science
Degree Requirements

I. Fulfillment of the requirements for the major as listed under the respective departments: biology, chemistry, economics, mathematics, physics, public administration and sociology. A Bachelor of Science degree is also offered in law enforcement.

II. At least 12 semester-hours of course work outside the area of specialization as follows:
   (a) If the degree is in the behavioral sciences, 12 hours outside those fields.*
   (b) If the degree is in the natural sciences or mathematics, 12 hours outside those fields.
   (c) If the degree is in the social sciences, 12 hours outside those fields.*

III. At least 12 semester-hours of English.

IV. Total minimum semester-hours, 120.

*See Section II. under Bachelor of Arts Degree Requirements, College of Arts and Sciences, for list of social and behavioral sciences courses.

Bachelor of Music
Degree Requirements

I. General Education 32
II. Basic Musicianship 58
III. Music Electives 18
IV. Free Electives 22
V. Total minimum semester-hours 130
(For details, see the music section under Department of Fine and Performing Arts.)

Certification for Secondary School Teaching

Students who wish to become secondary school teachers should consult with the Department of Education for a list of recommended courses in the major area.

Course Notes

A schedule of classes will be available before registration for each semester. 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. The University reserves the right to change the class 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 497-498) 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 indicates that the subject matter or content of the course extends through two semesters but that either semester may be taken by itself. Unless otherwise specified, the first semester is not prerequisite to the second semester.
- The credit in semester-hours is shown in brackets in each course description [3].
- The sample schedules listed under each department are illustrative schedules only. Courses need not be taken in the precise sequences or semesters indicated, except as prerequisites or other necessities prescribe.
Interdisciplinary Programs

American Studies

Aileen S. Walls, Chairman *

American Studies Committee
Lorraine A. Brown (Department of English)
Paul J. Mika (Department of Public Affairs)
Norman A. Yance (Department of Philosophy and Religion)

Requirements for the Major
This interdisciplinary program culminates in the conferral of the degree of Bachelor of Arts with a major in 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 and the requirements for a major in American studies. The American studies major requires the presentation of 42 hours in American studies divided as follows:

A. Nine semester-hours in interdisciplinary seminars:
American Studies 302: Introduction to American Studies [3]
American Studies 401: Themes in American Civilization [3]
American Studies 402: Reading in American Studies [3]

B. A minimum of nine semester-hours in English selected from the following courses:

English 330: American Folklore [3]
English 380: Recent American Fiction [3]
English 381: Colonial and Federalist American Literature [3]
English 382: American Renaissance [3]
English 384: Literature of the Modern South: 1920 to the Present [3]
English 385: American Poetry of the Twentieth Century [3]
English 386: Literature of Black America [3]
English 387: Development of the American Novel to 1914 [3]
English 388: Development of the American Novel Since 1914 [3]
English 389: Plays of Twentieth Century American Dramatists [3]
English 390: Recent American Poetry [3]
English 441: Studies in English and American Literary Topics, Periods or Genres [3]
English 442, 444, 446: Selected Studies and Writers (In semesters when selections deal with American Literature) [3, 3, 3]

C. A minimum of six semester-hours in history selected from the following courses:

History 333: Westward Movement in the United States [3]
History 341, 342: U.S. Constitutional History [3, 3]
History 343, 344: Diplomatic History of the United States [3, 3]

*Inquiries concerning this program should be directed to Dr. Aileen S. Walls, Chairman, American Studies Committee, Department of English, George Mason University, Fairfax, Va. 22030; Telephone (703) 323-2223.

Sample Schedule for a Double Major in American Studies and English

First Semester
English 101 3
Foreign Language 4
History 121 3
Sociology 101 3
Lab. Science 4

Second Semester
English 102 3
Foreign Language 4
History 122 3
Sociology 152 3
Lab. Science 4

Third Semester
English 205 3
Religion 231 3
Sociology 306 3
Philosophy 171 3
History 333 3

Fourth Semester
English 206 3
Philosophy 272 3
Religion 332 3
Math 106 3
Government 204 3

Fifth Semester
English 351 3
English 381 3
Philosophy 331 3
History 411 3
English 365 3

Sixth Semester
American Studies 302 3
English 352 3
English 382 3
History 412 3
English 358 3

Seventh Semester
American Studies 401 3
English 385 3
English 387 3
English 397 3
English 361 3

Eighth Semester
American Studies 402 3
English 388 3
English 384 3
English 382 3
English 395 3

*
### Sample Schedule for a Double Major in American Studies and History

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**History Courses**

- **History 351**: History of the Old South or 352, South Since 1865 [3]
- **History 401**: Colonial America [3]
- **History 403**: The Early National Period in U.S. History, 1783-1820 [3]
- **History 406**: Civil War and Reconstruction [3]
- **History 411, 412**: Cultural and Intellectual History of the United States [3, 3]
- **History 433**: United States in the Twentieth Century [3]
- **History 495**: Racism in the United States [3] Open only to American Studies and history Majors.

D. A minimum of eighteen semester-hours from courses directly related to the American Studies program:

1. A minimum of nine semester-hours must be selected from the courses listed below:
   - Biology 271: Animal Distributions [3]
   - Economics 150: The Urban Economy [3]
   - Economics 320: Labor Problems [3]
   - Geography 215: Geography of the United States and Canada [3]
   - Geography 301: Political Geography [3]
   - Geography 302: Suburban Geography [3]
   - Geography 304: Geography of Population [3]
   - Government 204: American State and Local Government [3]
   - Government 241: Introduction to Public Administration [3]
   - Government 310: Political Dynamics [3]
   - Government 415: Government and Politics of Metropolitan Areas [3]
   - Music 207: Development of Jazz [3]
   - Philosophy 331: Philosophy in the United States [3]
   - Religion 231: Religion in America [3]
   - Religion 236: Black Religion [3]
   - Religion 332: American Religion in Social Thought and Action [3]
   - Sociology 152: Social Problems [3]
   - Sociology 280: Sociology of Leisure [3]
   - Sociology 332: Sociology of Urban Communities [3]
   - Sociology 308: Sociology of Race Relations and Minorities [3]

2. An additional nine semester-hours must be selected from courses satisfying requirements (B), (C) or this section (D), or from other related courses to be selected by the student after consultation with his adviser.

### American Studies Courses

**302 Introduction to American Studies [3]**

Prerequisite: Open to junior American studies majors with consent of the Chairman, American Studies Committee. Introduction to interdisciplinary methods through intensive study of a period in the American past, integrating history, literature, music, art, architecture, philosophy, social sciences, technology, and popular and minority cultures of the period. Subject will be determined by the instructor conducting the seminar and may be obtained from him in advance.

**401 Themes in American Civilization [3]**

Prerequisite: Open to Senior American Studies majors with consent of the Chairman, American Studies Committee. Intensive study of a significant theme, motif, or idea in American culture. Subject will be determined by the instructor conducting the seminar and may be obtained from him in advance.

**402 Readings in American Studies [3]**

Prerequisite: Open to senior American studies majors with consent of the chairman, American Studies Committee. Application of American Studies methods to materials drawn from two or more of the participating disciplines, or not examined in traditional disciplines. Subject will be determined by the instructor conducting the seminar and may be obtained from him in advance.
European Studies

Requirements for the Major

This interdisciplinary program leads to the degree, Bachelor of Arts in European Studies. The student must present a minimum of 120 semester hours of course work for graduation, including satisfaction of all area requirements for the B.A. degree and the completion of 45 semester-hours of course work in the European Studies program as follows:

A. Twelve semester-hours in interdisciplinary seminars:

European Studies 300: Foundations of European Civilization [3]
European Studies 350: Classicism and Romanticism [3]
European Studies 400: The Fusion of the Arts [3]
European Studies 450: Contemporary European Problems and Values [3]

B. Three semester-hours of European Geography

Geography 220: Geography of Europe.

C. Thirty semester-hours in an area of concentration consisting of two related disciplines, selected from the following list. At least nine of the hours in each discipline must be earned at the 300-level or above.

a. language (English, French, German or Spanish) and the fine arts
b. language and history
c. language and government
d. language and philosophy

*The numbering system is a matter of convenience and does not indicate the order in which these seminars must be taken.

e. history and the fine arts
f. history and philosophy
g. history and government
h. government and philosophy

European Studies Courses

300 Foundations of European Civilization [3]
Prerequisite: Junior or senior standing and permission of instructors.
An examination of the Greek, Roman and Judeo-Christian origins of Europe's intellectual and cultural traditions, concentrating upon those models of political, social and artistic behavior that deeply influenced European life and thought.

350 Classicism and Romanticism [3]
Prerequisite: Junior or senior standing and permission of instructors.
An examination of the political, philosophical and aesthetic ideas of seventeenth, eighteenth and nineteenth century Europe. Study of the concepts included under the rubrics of classicism and romanticism will give perspectives on the two basic ways in which modern man views himself and his world.

400 The Fusion of the Arts [3]
Prerequisite: Junior or senior standing and permission of instructors.
An examination of contemporary art in the light of the past, and of the aesthetic theories by which the arts are analyzed and evaluated. Study of manifestations of aesthetics through form and structure and in the music and art of the past, as well as in the present age of technology.

450 Contemporary European Problems and Values [3]
Prerequisite: Junior or senior standing and permission of instructors.
An examination of the main currents of European life and thought in the twentieth century. Study of the principal influences and events of the period, culminating in an assessment of contemporary European problems and values.

European Studies Oriented Courses

In addition, the following departmental courses support the European Studies program:

A. Department of Economics

Economics 481: Development of Economic Thought [3]

B. Department of English

English 203, 204: Western Literary Masterworks [3, 3]
English 251, 252: Survey of English Literature [3, 3]
English 320: Myth and Symbol in Western Literature [3]
English 341: Chaucer [3]
English 342: Literature of the Middle Ages [3]
English 346: Spenser [3]
English 351, 352: Shakespeare [3]
English 353: English Renaissance Drama [3]
English 355: Milton [3]
English 356: Restoration and Eighteenth-Century Drama [3]
English 357: The Augustan Age [3]
English 358: The Age of Johnson [3]
English 365: Twentieth Century English Poetry and Prose [3]

English 370: English Novel of the Eighteenth Century [3]
English 371: English Novel of the Nineteenth Century [3]
English 372: English Novel of the Twentieth Century [3]
English 373: Literary Modes [3]
English 374: English and Irish Drama of the Twentieth Century [3]

English 375, 376: Contemporary Drama [3]

English 377, 378: Selected Continental Novels in Translation [3, 3]

English 392: History of the English Language [3]

English 451: Introduction to Literary Criticism [3]
### C. Department of Fine and Performing Arts

- **Art 221, 222**: Survey of Western Art [3, 3]
- **Art 223, 224**: Comparative Arts [3, 3]
- **Art 325, 326**: Medieval and Early Renaissance Art [3, 3]
- **Art 331**: Nineteenth-Century Art [3]
- **Art 332**: Twentieth-Century Art [3]

**Music**

- **Music 101, 102**: Music Appreciation [3, 3]
- **Music 204**: Introduction to Twentieth-Century Music [3]
- **Music 336**: Historical, Theoretical and Analytical Study of Music II [3]
- **Music 435**: Historical, Theoretical and Analytical Study of Music III [3]
- **Music 436**: Historical, Theoretical and Analytical Study of Music IV [3]
- **Music 445**: Bibliography and Research Techniques [3]

### D. Department of Foreign Languages

- **French 151, 152**: Elementary French [4, 4]
- **French 251**: Intermediate French [4]
- **French 252**: French Conversation [3]
- **French 253**: French Culture [3]
- **French 255**: French Literary Masterpieces [3]
- **French 325**: Major French Writers [in English translation] [3]

- **French 353, 354**: Advanced Conversation and Composition [3, 3]
- **French 375, 376**: French Culture and Civilization [3, 3]
- **French 377, 378**: Survey of French Literature [3, 3]
- **French 411, 412**: Literature of the 20th Century [3, 3]
- **French 415, 416**: Literature of the 19th Century [3, 3]
- **French 419, 420**: Literature of the 18th Century [3, 3]
- **French 423, 424**: Literature of the 17th Century [3, 3]
- **French 427**: Literature of the Renaissance [3]

- **German 151, 152**: Elementary German [4, 4]
- **German 153**: Review of Elementary German [4]
- **German 251**: Intermediate German [4]
- **German 252**: German Composition and Conversation [3]
- **German 254**: Readings in German Literature [3]
- **German 313, 314**: Advanced Conversation and Composition [3, 3]
- **German 325**: Major German Writers [in English translation] [3]
- **German 351, 352**: German Literature from its Beginnings to 1750 [3, 3]
- **German 361, 362**: German Literature of the Romantic Era [3, 3]
- **German 370**: German Literature from the Decline of Romanticism to 1880 [3]
- **German 405, 406**: The Age of Goethe [3, 3]
- **German 411, 412**: German Literature Since 1880 [3, 3]

- **Latin 101, 102**: Elementary Latin [3, 3]
- **Latin 201, 202**: Intermediate Latin [3, 3]

- **Classics 250**: Classical Myths and Legends [3]

- **Portuguese 151, 152**: Elementary Portuguese [4, 4]
- **Portuguese 251**: Intermediate Portuguese [4]

- **Russian 151, 152**: Elementary Russian [4, 4]
- **Russian 252**: Russian Conversation and Composition [3]

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**Sample Schedule for a Major in European Studies**

(Concentration: History and Government)

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Undergraduate Catalog 1975-1976
George Mason University

http://catalog.gmu.edu
### Sample Schedule for a Major in European Studies

**Concentration: French and the Fine Arts**

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<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>English 203</td>
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<tr>
<td>Psychology 101</td>
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<tr>
<td>Music 101</td>
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<tr>
<td>Mathematics 106</td>
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<td></td>
<td><strong>Total</strong></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>English 204</td>
<td>3</td>
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<tr>
<td>French 376</td>
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<tr>
<td>Psychology 102</td>
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<tr>
<td>Music 102</td>
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<td>Government 132</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Fifth Semester</strong></td>
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<tr>
<td>European Studies Seminar</td>
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<td>3</td>
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<tr>
<td>Non-Western Studies</td>
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<tr>
<td>French 377</td>
<td>3</td>
<td></td>
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<tr>
<td>French 415</td>
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<tr>
<td>Philosophy 232</td>
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<tr>
<td><strong>Sixth Semester</strong></td>
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<tr>
<td>European Studies Seminar</td>
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<td>3</td>
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<tr>
<td>Non-Western Studies</td>
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<td>3</td>
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<tr>
<td>French 378</td>
<td>3</td>
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<td>French 416</td>
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<td>Music 204</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Seventh Semester</strong></td>
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<tr>
<td>European Studies Seminar</td>
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<td>3</td>
</tr>
<tr>
<td>Art 331</td>
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<tr>
<td>History 440</td>
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<tr>
<td>Philosophy 333</td>
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<tr>
<td><strong>Eighth Semester</strong></td>
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<tr>
<td>European Studies Seminar</td>
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<td>3</td>
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<tr>
<td>French 412</td>
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<td>Art 332</td>
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<td>Geography 220</td>
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<td>Music 336</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**E. Department of History**

| History 101, 102: Western Civilization [3] |
| History 301: Classical Greece and Rome [3] |
| History 302: Imperial Rome and Byzantium [3] |
| History 303: Western Europe in the Middle Ages [3] |
| History 305: The Renaissance [3] |
| History 306: The Reformation [3] |
| History 307: Nineteenth-Century Europe [3] |
| History 309: Contemporary Europe [3] |
| History 310: History of Germany [3] |
| History 323: England through the Revolution of 1688 [3] |
| History 324: England from the Revolution of 1688 [3] |
| History 325: Tudor and Stuart England [3] |
| History 328: Rise of Russia [3] |
| History 329: Modern Russia and the Soviet Union [3] |
| History 421: Intellectual and Cultural History of Europe, 1715-1848 [3] |
| History 422: Intellectual and Cultural History of Europe, 1848 to the present [3] |
| History 441: France Since the Revolution [3] |
| History 443: History of Spain and Portugal [3] |
| History 480: Alexander and the Hellenistic World [3] |

**F. Department of Philosophy and Religion**

| Philosophy 213: Philosophy of Religion [3] |
| Philosophy 231, 232: History of Western Philosophy [3, 3] |
| Philosophy 271: Metaphysics [3] |
| Philosophy 332: Twentieth Century Analytic Philosophy [3] |
| Philosophy 333: Contemporary Continental Thought: Existentialism and Phenomenology [3] |
| Philosophy 356: Philosophy of Art [3] |

**G. Department of Public Affairs**

| Geography 220: Geography of Europe [3] |
| Geography 230: Geography of the Soviet Union [3] |
| Government 132: Introduction to International Politics [3] |
| Government 330: Political Values [3] |
| Government 450: Cross-National Political Study [3] |
Latin American Studies

Frank MacD. Spindler, Chairman
Latin American Studies Committee
Michael G. Emsley (Department of Biology)
James W. Fonseca (Department of Public Affairs)
Lydia D. Hazera (Department of Foreign Languages)

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 36 semester-hours of course work in Latin American studies divided to include (a) 18 semester-hours, upper division courses (300-400 level) in a core discipline and (b) 18 semester-hours of Latin American oriented courses other than the core discipline, including the interdisciplinary seminar on contemporary Latin America (LAS 491). A list of courses meeting requirement (b) above is provided below. 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.
Latin American Studies Course
491 Contemporary Latin America [3]
Required of senior majors in the Latin American program. Open to
other students by permission. A study of the interrelationship of
economic, political and social factors in explaining current Latin
American reality.

Latin American Oriented Courses
The following courses may be presented to meet requirement
(b) above. Students are advised to check with the departments
concerned as to prerequisites for these courses.

Department of Biology:
Biology 271: Animal Distributions [3]

Department of Economics:
Economics 360: Economics of Developing Areas [3]
Economics 361: Economic Development of Latin America [3]
Economics 481: Seminar in the Development of Economic
Thought [3]

Department of Fine and Performing Arts:
Music 206: Latin American Music [3]

Department of Foreign Languages:
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 258: Masterpieces of Spanish 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 315: Latin American Civilization and Culture [3]
Spanish 316: Social and Political Themes in the Latin Ameri-
can Novel [3]
Spanish 320: Linguistics of the Spanish Language [3]
Spanish 325: Major Spanish Writers [3]
Spanish 401: Latin American Poetry [3]
Spanish 403, 404: Contemporary Spanish Literature [3, 3]
Spanish 407, 408: Latin American Novel and Short Story
[3, 3]
Spanish 410: Cervantes [3]
Spanish 412: Special Studies in Hispanic Literature [3]

Department of General Studies:
LAC 151: Latin America [3]

Department of History:
History 272: Latin American History: The Modern Era [3]
History 343, 344: Diplomatic History of the United States
[3, 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]

Department of Philosophy and Religion:
Philosophy 231, 232: History of Western Philosophy [3, 3]
Philosophy 334: Latin American Thought [3]

Department of Public Affairs:
Geography 201: Geography of Latin America [3]
Government 132: Introduction to International Politics [3]
Government 450: Cross-National Political Study [5]

Department of Sociology:
Sociology 307: Sociology of Collective Behavior [3]
Sociology 308: Sociology of Race Relations and Minorities [3]
Sociology 332: Sociology of Urban Communities [3]
Sociology 385: Sociology of Religion [3]
Sociology 392: Formal Organization [3]
## Law Enforcement

Stephen T. Early, Jr.*

### 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 this degree and with the academic regulations of George Mason University. The program is designed principally for students who have completed their professional 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. The University offers no professional courses in law enforcement, corrections or similar fields. Such work must be taken in an accredited program at another institution and transferred to the University. Credits earned in law enforcement courses may not be transferred to other majors.

Generally, not more than one-half of the total of 128 semester hours required by this program may be transferred to the University from one or more junior or community colleges.

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.

### Minimum Quantitative and Distributional Requirements by Subject

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. General</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>a. English Composition</td>
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<tr>
<td></td>
<td>b. Literature</td>
</tr>
<tr>
<td></td>
<td>c. Art, music, religion and/or philosophy (excluding applied music and studio art courses)</td>
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<tr>
<td></td>
<td>d. American History or Principles of Economics</td>
</tr>
<tr>
<td></td>
<td>e. A two-semester sequence in one science with a laboratory</td>
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<td></td>
<td><strong>Total</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>II. Major requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Law enforcement</td>
</tr>
</tbody>
</table>

These courses or their equivalents are required professional preparation for this degree program.

- Introduction to Law Enforcement
- Patrol Administration
- Police Organization and Administration I, II, III
- Special Enforcement Problems
- Law Enforcement and the Community
- Criminal Law, Evidence and Procedure I, II, III
- Criminal Investigation Techniques I, II

b. Directly related

1. Government | **16**
   - To consist of separate courses in national and in state and local government and, at George Mason University, two courses from among those designated Govt. 301, 330, and 415.

2. Psychology | **12**
   - To consist of Psychology 100, 215, 231 and 325.

3. Sociology | **18**
   - To consist of Sociology 101, 152 and four courses selected from among Sociology 202, 302, 305, 307, 308, 332 and 402.

<table>
<thead>
<tr>
<th></th>
<th>c. Electives</th>
<th><strong>28-17</strong></th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
</table>

Students who attend George Mason University to complete the program leading to the B.S. with a major in law enforcement usually bring with them approximately 65 semester hours of work or its equivalent.

Remaining work may be completed in a schedule similar to the following:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Art, music, philosophy or religion</th>
<th>Government elective</th>
<th>Sociology elective</th>
<th>Elective</th>
<th>Psychology 215</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Sixth</td>
<td>Sociology elective</td>
<td>Government elective</td>
<td>Psychology 231</td>
<td>Electives</td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Seventh</td>
<td>Sociology elective</td>
<td></td>
<td>Psychology 325</td>
<td>Electives</td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Eighth</td>
<td>Sociology elective</td>
<td></td>
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<td><strong>16</strong></td>
</tr>
</tbody>
</table>

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 prior to transfer.

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

*Inquiries concerning this program should be directed to Dr. Stephen T. Early, Jr., Department of Public Affairs, George Mason University, Fairfax, Virginia 22030.

http://catalog.gmu.edu
George Mason University offers a two-year 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 other schools of engineering.

All entering freshmen in engineering are required to take a proficiency examination in elementary algebra and trigonometry. The test will be given on the following designated dates, before the beginning of the summer, fall and spring semesters: May 24, 1975, July 7, 1975, August 24, 1975 and January 12, 1976. Any student who fails the examination will be required to take Mathematics 101 or to retake and pass the examination prior to registration.

### Engineering Courses (Two Years Only)

#### 104 Introduction to Engineering [3]
Prerequisite: Mathematics 113 or permission of instructor. Introduction to the technological problems encountered in the profession of engineering and the role of the engineer in society. Approaches and methods used in problem solving, including computer techniques, Three hours lecture.

#### 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.

#### Sample Schedule for the Engineering Program

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>Physics 113</td>
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<tr>
<td>Mathematics 113</td>
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<tr>
<td>Chemistry 111</td>
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<tr>
<td>English 101</td>
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<tr>
<td>Engineering 191</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>Physics 114</td>
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<tr>
<td>Mathematics 114</td>
</tr>
<tr>
<td>Chemistry 112</td>
</tr>
<tr>
<td>English 102</td>
</tr>
<tr>
<td>Engineering 104</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 213</td>
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<tr>
<td>Physics 215</td>
</tr>
<tr>
<td>Mathematics 213</td>
</tr>
<tr>
<td>Engineering 285</td>
</tr>
<tr>
<td>Engineering 205</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester</th>
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</thead>
<tbody>
<tr>
<td>Physics 214</td>
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<tr>
<td>Physics 216</td>
</tr>
<tr>
<td>Mathematics 214</td>
</tr>
<tr>
<td>Engineering 302</td>
</tr>
<tr>
<td>Engineering 206, or 207, or 208</td>
</tr>
</tbody>
</table>

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Prerequisite: Mathematics 114, Physics 113. 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 Mechanics of Materials [3]
Prerequisite: Engineering 205 and Physics 114 or permission of instructor. Concept of stress, strain, elasticity and plasticity, combined stress, torsion, stresses and deflection of beams, statically indeterminate members, unsymmetrical bending, buckling of columns. 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 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.
Requirements for the Major

B.S. and B.A. Degree. All biology majors must demonstrate proficiency in elementary mathematics by either passing Mathematics 101: Algebra and Elementary Functions or passing the mathematics department proficiency test for that course.

B.A. Degree. In addition to the general requirements, a minimum of 32 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. Biology credit may be gained in 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 44 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 biochemistry. Physical chemistry, introductory college physics, and calculus are recommended.

*Coding in parentheses refers to degree requirements listed in the front of The College of Arts and Sciences section of this catalog.
Sample Schedule for Bachelor of Science with Major in Biology

First Semester
English 101  3
Biology 113  4
Chemistry 111  4
Non-sci elective  4

Second Semester
English 102  3
Biology 114  4
Chemistry 112  4
Non-sci elective  4

Third Semester
English Lit  3
Biology 283 or Bio elective  4
Chem 213–Lab  4
Non-sci elective  4

Fourth Semester
English Lit  3
Biology elective or Bio 283  4
Chemistry 214–Lab II  4
Biology elective  4

Fifth Semester
Biology 311 or 445  4
Biology elective  4
Elective  3-4
Elective  4

Sixth Semester
Biology 445 or 311  4
Biology elective  3-4
Elective  3-4
Elective  4

Seventh Semester
Biology elective  4
Biology elective  3-4
Elective  3
Elective  3
Elective  2

Eighth Semester
Biology elective  4
Biology elective  3-4
Elective  3
Elective  3
Elective  1-1-17

For students intending to pursue graduate study in biology the following are recommended:
1 Foreign Language (German, Russian, or French)
2 Physics 101-102
3 Mathematics 113-114
4 Mathematics 266
5 Biostatistics

Students planning to enter medical, dental or veterinary schools may choose to major in biology. Those desiring medical careers may satisfy the entrance requirements with a B.A. degree but those in predentistry or preveterinary medicine are advised to seek B.S. degrees. In any case they should complete organic chemistry, a year of analytical geometry and calculus and Physics 101-102. Some schools prefer students with more extensive backgrounds in biological or physical sciences, others indicate that the undergraduate years are better devoted to humanistic pursuits that are unavailable in professional schools. Because these schools vary both in their philosophies and in their specific requirements it is wise for the student to contact schools of choice sometime before application for admission. The Commonwealth of Virginia provides veterinary medicine education for its residents through arrangements with the University of Georgia and Ohio State University. Information on this program is available from the Department of Veterinary Science, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.

Biology Courses

Natural Science Requirements. Students not majoring in science or mathematics should fulfill the Natural Science Requirement with the two-semester laboratory sequence 103, 104. If a student has passed 103, or 103 and 104, and subsequently decides to become a biology major the student should consult the chairman of the Department of Biology. If it is deemed necessary for the student to complete the sequence 113, 114, which would normally be the case, then only two semester-hours of credit for each of the completed courses 103, 104 will be permitted to be offered towards the B.A. degree; however, these hours may be applied toward the major.

103 Man and His Environment [4]
Biology for non-science majors. The course emphasizes biological problems facing modern man. Topics include theories of the origin of earth and life, ecological principles and their application, biotic communities, principles of human anatomy and physiology, the mechanisms of inheritance and evolution, and the evolution of man. Three lecture hours, three laboratory hours. This course may not be combined with 113 or 114 for the fulfillment of the science requirement. Students who have taken Biology 101-102. General Biology or Biology 113-114: Biological Science are not eligible to take this course.

104 Man and His Environment [4]
Prerequisite: Biology 103. The sequential semester to Biology 103. Three lecture hours, three laboratory hours. This course may only be combined with Biology 113 for the fulfillment of the science requirement with the written permission of the Chairman of the Department of Biology.

113 Biological Science [4]
An introductory course for prospective science majors and pre-professionals in the life sciences. The study of living organisms, their structure, function, metabolism, growth, reproduction, heredity, interrelations, evolution and diversity, and of ecological principles. Three lecture hours, three laboratory hours. Students who have taken Biology 101-102. General Biology are not eligible to take this course. Students who have previously passed 103, or 103 and 104, should read the section titled Natural Science Requirements above.

114 Biological Science [4]
Prerequisite: Biology 113. The sequential semester to Biology 113. Three lecture hours, three laboratory hours.

124 Human Anatomy and Physiology [4]
An introductory course in the microscopic and gross structure of the major organ systems of the human body and their integrated function. Three lecture hours, three laboratory hours. Open only to nursing and physical education majors. This course will not satisfy the Natural Science Requirement in the College of Arts and Sciences. Not available for biology major credit.

125 Human Anatomy and Physiology [Continued] [4]
Prerequisite: Biology 124. The sequential semester to Biology 124. Three lecture hours, three laboratory hours.

Biology courses are continued on the next page.
140 Plants and Man [4]
An introduction to the relationships between cultivated plants and man. The uses of various plants by man and the role of plants in the history and culture of man, as well as man's impact on the vegetable world, particularly as it relates to present agricultural practices. The laboratory is devoted to familiarization with interesting economic plants and practice in horticulture and gardening. Three lecture hours, three laboratory hours, Not available for credit toward the major in biology.

185 Introductory Microbiology [4]
Prerequisites: Biology 124-125 or permission of instructor. An introduction to the bacteria, yeasts, molds, viruses, rickettsiae, and endoparasites with emphasis on organisms important to human health and disease. A discussion of immunity and serological procedures. Laboratory includes sterile technique and culture methods for microorganisms. Three lecture hours, three laboratory hours. Only open to nursing majors. Not available for biology major credit.

211 Heredity and Society [3]
Basic principles of heredity, including elementary probability, the nature of the gene, mutations and mutant genes in populations. Some emphasis will be placed upon human hereditary diseases, genetic counselling and the application of genetics to improving the quality of life. Three lecture hours. Not available for biology major credit.

222 Reproductive Chordate Zoology [4]
Prerequisite: Biology 113, 114 or permission of instructor. A comparison of the anatomy and morphology of the major chordate groups. The laboratory will emphasize shark, Necturus, and rabbit. Two lecture hours, six laboratory hours.

221 Vertebrate Zoology [4]
Prerequisite: Eight semester-hours of credit in 100 level biology or permission of instructor. The phylogeny and systematics of the major vertebrate groups. Some emphasis will be given to ecological adaptation. The laboratory will include field studies of local fauna. Two lecture hours, six laboratory hours.

225 Human Reproduction and Sexuality [3]
A detailed examination of the anatomy and physiology of the human reproductive systems; the physiology of sexual intercourse and sexual behavior; normal pregnancy, birth and associated events; congenital conditions; sex determination and its expression throughout life; diseases of the reproductive organs, modern technical developments related to human reproduction. Three lecture hours. Not available for biology major credit.

243 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.

245 Plant Communities [4]
Prerequisite: Eight semester-hours of credit in 100 level biology or permission of instructor. A study of plant associations and formations and their successions in North America. Three lecture hours, three laboratory hours.

271 Animal Distributions [3]
Prerequisites: Eight semester-hours of credit in 100 level biology or permission of instructor. Relations of the North and South American faunas with other regions in the light of continental drift, Emphasis on 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 111, 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.

311 General Genetics [4]
Prerequisites: Biology 113, 114, 283, and junior standing, 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 [4]
Prerequisite: Biology 113, 114 and the permission of the instructor. Applied statistical analysis of biological data, including experimental design, descriptive statistics, parametric and related nonparametric inferential statistics, and correlation-regression techniques. Three lecture hours, three laboratory 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 development 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.

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: Eight 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: Eight 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. Three lecture hours, three laboratory hours.

344 Taxonomy of Flowering Plants [4]
Prerequisite: Eight 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.

362 Vertebrate Physiology [4]
Prerequisite: Biology 113, 114, 283, Chemistry 112, or permission of instructor. A general survey of the functions of the organ systems of vertebrates. Fundamental experiments in the physico-chemical phenomena of nerve and muscle, blood and circulation, respiration, digestion, electrolyte balance, and excretion. Three lecture hours, three laboratory hours.

381 Immunology [4]
Prerequisite: Biology 113, 114, 283, 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.

382 Virology [3]
Prerequisites: Biology 283 or permission of instructor. Fundamental concepts of the nature of viruses, viral classification, morphology, chemistry, serological properties, and assay methods. A study of model virus systems illustrating current knowledge of modes of replication of viruses. Concepts on tumor viruses emphasized. Three lecture hours.

412 Microbial Genetics [3]
Prerequisites: Biology 113, 114, and 281, or permission of instructor. An introduction to the 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.

413 Selected Topics in Genetics [3]
Prerequisite: Biology 311 or equivalent or permission of instructor. Different topics in different years. Among topics to be considered are molecular, developmental, physiological and classical genetics with emphasis on current problems and research. Three lecture hours.

414 Research Techniques in Molecular Biology [4]
Prerequisites: Biology 283, Biology 311, Chemistry 213-214, and senior standing. Recommended: Biology 281. A laboratory course designed to acquaint students with research methods in molecular biology stressing genetic, biochemical, and microbiological techniques. Two lecture hours, six laboratory hours.

441 Plant Anatomy [4]
Prerequisite: 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.

445 Ecology [4]
Prerequisites: Biology 113, 114, 283 and one other course in biology and junior standing, 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 adaption to new environments, and the effects of temperature, moisture, altitude and environmental quality upon organisms. Three lecture hours.

447 Microbial Ecology [4]
Prerequisites: Biology 113, 114, 283, 281 or permission of instructor. An introduction, in detail, to the principles and methods of microbial ecology. A study of the relationships between microorganisms and their natural environment, and the methodology for observing their biochemical activities in those environments. Three lecture hours, three laboratory hours.

448 Symbiology [4]
Prerequisite: Biology 113, 114 and 331, or permission of instructor. An introduction to concepts of symbiology and evolution of these relationships from structural, physiological, and behavioral standpoints. Three lecture hours, three laboratory hours.

462 Advanced Cellular Physiology [3]
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.

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.

465 Histology [4]
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: Eight semester-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. Not available for credit toward the major in Biology.

480 Ichthyology [4]
Prerequisites: Biology 113-114, or permission of instructor. An introduction to the study of fishes, their systematics, evolution, physiology, ecology and behavior (especially migration). Three lecture hours, three laboratory hours.

482 Ornithology [4]
Prerequisites: Biology 113-114, or permission of instructor. A study of the evolution, systematics, physiology, ecology and ethology of birds. Emphasis will be placed on field studies. Two lecture hours, six laboratory hours.

483 Mammalogy [4]
Prerequisite: Biology 113-114, or permission of instructor. A study of the evolution, systematics, physiology, ecology and ethology of mammals. Emphasis will be placed on field studies. Two lecture hours, six laboratory hours.

484 Vertebrate Paleontology [4]
Prerequisite: a course in vertebrate zoology or comparative anatomy, or permission of instructor. A study of the evolutionary patterns of the vertebrates. Emphasis will be placed on major adaptive radiations. Two lecture hours, six laboratory hours.

485 Herpetology [4]
Prerequisite: Biology 113-114, or permission of instructor. A study of the evolution, systematics, physiology, ecology and ethology of amphibians and reptiles. Emphasis will be placed on field studies. Two lecture hours, six laboratory hours.

490 Tropical Field Studies [3]
Prerequisite: biology major with senior standing and permission of instructor. A biological survey of a tropical environment. Total class time: 15 lecture hours, 90 laboratory hours.

497-498 Special Problems in Biology [2-12]
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 faculty.
# Department of Chemistry

**Professors** Walter (Chairman), Krug  
**Associate Professors** Cozzens, Feinstein, Mushrush  
**Assistant Professors** Berry, Greer, Keeler, Stalick, Yonuschot  
**Instructor** Eassa  
**Lecturer** Ali

## Requirements for the Major

**B.A. Degree.** In addition to general degree requirements, a minimum of 32 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. 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>Course</th>
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Required courses in chemistry must include those indicated for the B.A. degree plus Chemistry 422, 441, and 445.

## Chemistry 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.

**105 Men's Chemical World [3]**  
A study of the chemical nature of the world in which we live. Emphasis will be given to the nature and importance of the chemical pollutants of our environment, the chemistry of the natural world (geochemistry, atmospheric chemistry, etc.) as well as industrial and agricultural chemistry. Satisfies the non-laboratory science requirement for the B.A. degree.

**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, three laboratory 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.

**222 Chemical Equilibrium [2]**  
Prerequisite: Chemistry 111-112. Study of equilibrium in ionic and biochemical solutions and of related homogeneous and heterogeneous separations. Topics will include polyfunctional acids and bases, complex formation, chromatography, and ion exchange.

**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.

## Sample Schedule for B.A. in Chemistry

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http://catalog.gmu.edu
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<tr>
<td><strong>First Semester</strong></td>
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331 Physical Chemistry I [3]
Prerequisite: Chemistry 111-112, Mathematics 113, 114. Prerequisite or corequisite: Physics 101 or 113. 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.

335 Physical Chemistry for the Life Sciences [3]
Prerequisite: Chemistry 111-112. This course will deal with the classical topics of physical chemistry with an emphasis on their application to biology and the health sciences. Rigorous mathematical approaches to the theory of physiochemical processes will be avoided. Topics covered will include gas laws and kinetic theory, structure of solids and liquids, applied thermodynamics, kinetics, and chemical equilibria. Where possible, examples applicable to the life sciences will be used. Not open to students who have passed Chemistry 331. Credit is not allowed towards a major in chemistry.

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 year-long introduction to laboratory practices and theories of experimental physical chemistry. Three laboratory hours.

337 Physical Chemistry Laboratory II [1]
Prerequisite or corequisite: Chemistry 331. Continuation of Chemistry 336. Three laboratory hours.

413 Special Topics in Organic Chemistry [3]
Prerequisite: Chemistry 213-214. An advanced study of synthetic and mechanistic organic chemistry with particular emphasis on selected topics such as heterocycles, natural products and biologically active compounds. Finally, the relation of applied organic chemistry to consumer products, including drugs and agricultural chemicals, will be examined.

422 Instrumental Analysis [4]
Prerequisite: Chemistry 321; prerequisite: 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 the use of modern analytical instrumentation. It offers the student an introduction to the theory and practice of 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 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 departmental research committee. 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, 462 Biochemistry [3, 3]
Prerequisite: Chemistry 213-214. Chemistry 461 is a prerequisite for Chemistry 462. Chemistry of biologically important compounds, viz., proteins, carbohydrates, lipids, and nucleic acids, and their inter-relations.

Geology Courses

101 Physical Geology [4]
Survey of the geologic features of the earth—its rocks and minerals, its surface features, and the processes acting upon and within the earth's crust. This course, together with Geology 102, satisfies the eight hour laboratory science requirement for the B.A. degree. Three lecture hours, three laboratory hours.

102 Historical Geology [4]
Prerequisite: Physical Geology 101. History and development of the earth as revealed through a sequence of geologic events and processes. Subjects studied will include geologic origins of the earth, succession of life forms, geologic ages and time. Three lecture hours, three laboratory hours.
Department of Economics

Professor Snively (Chairman)
Associate Professors Bennett, Block, Hayn, Phillips
Assistant Professors Chung, Cohen, Solomon
Acting Assistant Professors Cummings, Nagarajan, Wiest
Lecturers Arafat, Bennett, Bobba, Broussalian, Johnson, Kraft, Marlin, McElhone, Wilson

Requirements for the Major

B.A. Degree. 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 33 hours of work in economics, to include Economics 306 and 311. Six hours of statistics must be completed in addition to the 33 hours of economics mentioned above. Credit hours in economics may be earned in excess of 42 but the surplus hours must be listed as elective hours on the degree application form.

B.S. Degree. In addition to the general requirements for the B.S. degree listed in the catalog, the B.S. with a major in economics requires 39 hours of credit in economics to include Economics 306, 311 and 345. In addition to the 39 hours of credit in economics, students must also complete Business Administration 201 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.

Economics Courses

103 Contemporary Economic Principles and Issues I [3]
An introduction to microeconomics in the context of current problems. The course explores how the market mechanism allocates scarce resources among competing uses. It utilizes the basic tools of supply and demand, and production and distribution theory, to analyze problems as diverse as public education, environmental quality, poverty and discrimination, the negative income tax, energy, price controls, and illegal activities. May not be taken for credit by students who have passed Economics 102. (May be taken after Economics 104.)

104 Contemporary Economic Principles and Issues II [3]
An introduction to macroeconomics in the context of current problems. Topics considered include national income analysis, money and banking, economic growth and stability, unemployment, inflation, and the role of government in the economy. May not be taken for credit by students who have passed Economics 101. (May be taken before Economics 103.)

150 The Urban Economy [3]
A study of metropolitan economic activity. A problems oriented course, designed to develop a general understanding of the nature and applicability of economic analysis. Topics to be covered will include: housing and urban renewal; pollution; transportation; poverty and discrimination; urban, suburban and regional development and growth; and metropolitan finance.

306 Intermediate Microeconomics [3]
Prerequisite: Economics 103 and 104 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. May not be taken for credit by students who have passed Economics 202.

309 Economic Problems and Public Policies [3]
Prerequisite: Economics 103 and 104 or permission of instructor. A detailed study of important economic problems in light of current and proposed public policies. May not be taken for credit by students who have passed Economics 406.

310 Money and Banking [3]
Prerequisite: Economics 103 and 104 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. May not be taken for credit by students who have passed Economics 301.

311 Intermediate Macroeconomics [3]
Prerequisite: Economics 103 and 104 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. May not be taken for credit by students who have passed Economics 201.

316 Economic Growth and Business Cycles [3]
Prerequisite: Economics 310 or 311 or permission of instructor. An examination of the factors contributing to sustained economic growth with additional emphasis on business fluctuations and their measurement. May not be taken for credit by students who have passed Economics 303.

320 Labor Problems [3]
Prerequisite: Economics 103 and 104 or permission of 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. May not be taken for credit by students who have passed Economics 300.

Sample Schedule, B.A. in Economics

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311 Intermediate Macroeconomics [3]
Prerequisite: Economics 103 and 104 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. May not be taken for credit by students who have passed Economics 201.

316 Economic Growth and Business Cycles [3]
Prerequisite: Economics 310 or 311 or permission of instructor. An examination of the factors contributing to sustained economic growth with additional emphasis on business fluctuations and their measurement. May not be taken for credit by students who have passed Economics 303.

320 Labor Problems [3]
Prerequisite: Economics 103 and 104 or permission of 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. May not be taken for credit by students who have passed Economics 300.
## Sample Schedule, B.S. with a Major in Economics

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<th>Semester</th>
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### 321 Economics of Labor [3]
Prerequisite: Economics 306. 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. May not be taken for credit by students who have passed Economics 420.

### 330 Public Finance [3]
Prerequisite: Economics 306 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. May not be taken for credit by students who have passed Economics 302.

### 340 Introduction to Mathematical Economics [3]
Prerequisite: Economics 306 and 311, and Mathematics 113 and 114, or permission of instructor. Among the topics to be covered are mathematical treatment of the theory of firm and household behavior, stabilization policy, growth theory, input-output analysis, and linear programming.

### 345 Introduction to Econometrics [3]
Prerequisite: Economics 306 and 311, and Business Administration 261 and 262. An examination of modern statistical techniques in estimating economic relations. May not be taken for credit by students who have passed Economics 412.

### 350 Regional and Urban Economics [3]
Prerequisite: Economics 306 or permission of instructor. The economics of regional development and metropolitan growth, including the locational decisions of households and firms, and problems associated with high density urban economic activity, such as neighborhood effects, traffic congestion, pollution, discrimination and spatial monopoly.

### 360 Economics of Developing Areas [3]
Prerequisite: Economics 103 and 104 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. May not be taken for credit by students who have passed Economics 307.

### 361 Economic Development of Latin America [3]
Prerequisite: Economics 104 or permission of instructor. An examination of the economic development, institutions and problems of Latin America. May not be taken for credit by students who have passed Economics 308.

### 370 Economics of Industrial Organization [3]
Prerequisite: Economics 306 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. May not be taken for credit by students who have passed Economics 304.

### 375 Economics of Transportation [3]
Prerequisite: Economics 103, 104. This course is designed to provide insight into the workings of the transportation industry in the United States. It discusses the differing economic structures of air, motor, rail and water transport and introduces decision rules for choosing the appropriate mode of transportation for any particular transportation requirement. Students will explore regulation of prices charged for service, services provided by each mode, and economic problems besetting each of the competing types of carriage.

### 390 Comparative Economic Systems [3]
Prerequisite: Economics 103 and 104 or permission of instructor. An examination of the theory, programs and practices of selected major contemporary economic systems, including capitalism, socialism, and fascism. Special attention is given to the role of planning in various countries. May not be taken for credit by students who have passed Economics 401.

### 390 International Economics [3]
Prerequisite: Economics 306 or permission of instructor. A survey of the foreign exchange market, of the balance of payments, of foreign trade policies, and of the Classical, Neoclassical and modern theories of international trade. May not be taken for credit by students who have passed Economics 404.

### 481 The Development of Economic Thought [3]
Prerequisite: Economics 306 and 311 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. May not be taken for credit by students who have passed Economics 403.

### 498 Seminar in Economics [3]
Prerequisite: Economics 306 and 311 and permission of instructor. A course in which the more important current economic problems will be studied and discussed in seminar form. May not be taken for credit by students who have passed Economics 430.

### 499 Independent Study [1-3]
Prerequisite: Open only to economics majors with senior standing and with the permission of the department and the instructor. Individual study of a selected area of economics. A directed research paper will be required.
Department of English

Professors Sundell (Chairman), Baxter, S. Brown, Jackson, Kominars, Molin

Associate Professors L. Brown, Garson, Gras, Karlson, Walls

Assistant Professors Gallehr, Gibson, Grossberg, Keith, Kelley, Kuebrich, Nadeau, O'Connor, Palmieri, Radner, Rutledge, Veninga

Acting Assistant Professor Woodson

Instructors Archarya, Foreman, Keaney, Lewis, Morgan

Lecturers Hartman, Nunes, Reithlingshoefer, Taylor, Taormina

Requirements for the Major
The following English major requirements take effect with the Fall 1975 semester; see "Catalog Requirements for Graduation."

In addition to the area requirements for a B.A. degree, students who wish to graduate with an English major must complete 30 hours of course work beyond sophomore English with the following distribution:

1. One three-semester hour course from the following: English 391, General Linguistics; English 392, History of the English Language; English 396, Introduction to Creative Writing; English 455, Literary Style; and English 467, Advanced Expository Writing. This requirement gives the student the opportunity to increase his understanding of the English language, either through an analysis of language (391, 392, and 455), or through a making of language (396 and 467), and consequently to appreciate better how language functions in literature.

2. Nine hours in English or American literature prior to 1900. This requirement may be met by courses listed in this catalog numbered English 341, Chaucer, through English 362, English Poetry of the Victorian Period; English 370, English Novel of the Eighteenth Century, and English 371, English Novel of the Nineteenth Century, English 381, Colonial and Federalist American Literature, and English 382, Literature of the American Renaissance; English 444, Selected Major English and American Writers before 1900; and sometimes English 441 and 442, Studies in English and American Literary Topics, Periods or Genres, only when these courses focus on subjects prior to 1900. This requirement gives the student the opportunity to study literature written in the English language in a period significantly different from his own, and by contrasting the past and the present to increase his appreciation of both.

In choosing the additional hours in English required for the major, each student, working with an adviser, shall make a judicious selection of courses which will foster a broad liberal education and prepare the student for graduate education or employment.
English Courses

English 101-102 and two three-hour courses from 200-level English courses are prerequisites for all English 300 and 400 courses, except that non-degree students who have completed six credits of English composition may enroll in courses numbered 301-309.

The Department of English offers English 301-309 to encourage the study of literature, film and writing by students not interested primarily in becoming English majors. These courses may be taken more than once for credit with the permission of the department. English majors may take up to six hours in the sequence for credit towards the major only with the permission of their advisers.

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. A student must attain a minimum grade of "C" in order to have these courses fulfill degree requirements.

203, 204 Western Literary Masterworks [3, 3]
Prerequisite: English 101-102. Great works of Western civilization; 203: writers such as Homer, Sophocles, Euripides, Dante, Cervantes, and Flaubert; 204: writers such as Dostoevski, Tolstoy, Mann, Camus, Malraux, Ionesco, and Beckett. All readings in modern English.

205, 206 Readings in English and American Literature [3, 3]
Prerequisite: English 101-102. English and American literature by types, English 205 focuses on selected English and American poetry and drama by such writers as Marlowe, Shakespeare, Shaw, O'Neill, Albee, Donne, Keats, Whitman, Frost, Eliot and Auden. English 206 focuses on selected English and American novels, short stories, and essays by such writers as Lawrence, Hemingway, Faulkner, Melville, Crane, E. Bronte, Fitzgerald and Barth.

251, 252 Survey of English Literature [3, 3]
Prerequisite: English 101-102. Major literary movements and works of English literature, focusing on the writings of such authors as Chaucer, Spenser, Shakespeare, Donne, Milton, Pope, Johnson, Wordsworth, Keats, Browning, Yeats, Eliot and Joyce.

301 Film [3]
American and foreign films selected by type, period, or director, with the emphasis varying from year to year. Emphasis may be placed on such directors as Griffith, Welles, Penn, Hitchcock, Bergman, Truffaut, and Antonioni. Types could include the Western, the epic, the thriller, the situation comedy, the documentary, and the experimental short. Required viewings, student discussion and written critiques.

303 Significant Authors [3]
One or two major authors, such as Shakespeare, Dickens and Hardy, or Tolkein and C. S. Lewis, as announced.

307, 308 Special Topics in Literature [3, 3]
A study of literature by topics, such as women in literature, literature of the frontier, literature and psychology, science fiction, and literature of the avant garde. The topic will change each time the course is offered.

309 Independent Writing [3]
Practice in analyzing and writing such expository forms as the essay, memo, article, and technical and scientific reports, depending upon the needs of the individual student. (Not a remedial course.)

320 Myth and Symbol in Western Literature [3]
A study of the traditional myths and archetypes of the past which have affected the development of Western literature. Sources such as the Bible, classical mythology, and primitive myths and rituals will be studied as well as literature consciously or unconsciously influenced by mythic structures. Some myth theory will be included.

330 American Folklore [3]
A study of folklore with emphasis on verbal and non-verbal forms in their distinctively American configuration. Consideration will be given to the use of folk elements in American literature by such authors as Twain and Faulkner.

341 Chaucer [3]
The major works of Chaucer, with emphasis on The Canterbury Tales.

342 Literature of the Middle Ages [3]
Selected English narrative, dramatic, and homiletic literature written between 1300 and 1500 A.D., exclusive of Chaucer.

345 English Poetry and Prose of the Sixteenth Century [3]
Poetry and prose of the early Renaissance in England.

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]
Major dramas and dramatists of the English Renaissance, exclusive of Shakespeare.

354 English Poetry and Prose of the Seventeenth Century [3]
English poetry and prose from 1603 to 1688, excluding Milton.

355 Milton [3]
Milton's major poetic works, with emphasis on Paradise Lost.

365 Restoration and Eighteenth-Century Drama [3]
Restoration comedy of manners, sentimental comedy, neo-classical 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.

367 The Augustan Age [3]
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]
The development of English literature of the late eighteenth century; readings from Dr. Johnson and his contemporaries with attention to the pre-Romantics.

361 English Poetry of the Romantic Period [3]

362 English Poetry of the Victorian Period [3]
Works of Tennyson, Browning, Arnold, Hopkins, Swinburne, and the Pre-Raphaelites.

365 English Poetry of the Twentieth Century [3]
English poetry from 1900 to the present, with an emphasis on the work of Hardy, Yeats, Lawrence, Graves, Auden, Thomas, and Hughes. A work of fiction which employs poetic techniques, such as Joyce's Ulysses, may also be studied.

370 English Novel of the Eighteenth Century [3]
The English novel from its beginnings through the turn of the nineteenth century. Works by such authors as Defoe, Richardson, Fielding, Sterne, Smollett, Scott, and Austin will be studied.

371 English Novel of the Nineteenth Century [3]
The English novel of the nineteenth century, Works by such authors as Dickens, Thackeray, E. Bronte, Eliot, Trollope, Meredith, and Hardy will be studied.

372 English Novel of the Twentieth Century [3]
The English novel from the beginning of the twentieth century to the present. Works by such authors as Conrad, Ford, Bennett, Forster, Lawrence, Joyce, Woolf, Huxley, Greene, Orwell, Beckett, Lessing, and Murdoch will be studied.

373 Literary Modes [3]
The theory and practice of such modes as tragedy, comedy, tragi-comedy, romance, and satire, considered in separate semesters and drawn from a variety of periods ranging from Biblical times to the present, with examples from drama, poetry, and fiction. This course may be repeated with permission of the department.

374 English and Irish Drama of the Twentieth Century [3]
English and Irish drama from Yeats to Pinter. Plays by such authors as O'Casey, Synge, Eliot, Frye, Osborne, Wesker, Behan, Delaney, and Pinter will be studied.

375, 376 Contemporary Drama [3, 3]
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]
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, Sartr, Cela, Moravia, and Grass. Attention will be given to the influence of this literature on the novel in English. (Offered in cooperation with the Department of Foreign Languages.)

380 Recent American Fiction [3]
A study of major American short story writers and novelists from World War II to the present. An emphasis on such writers as Mailer, Barth, Hawkes, Cheever, Oates, Gass, Kozinski, Pynchon, Vonnegut, Bellow, Nabokov, Updike, and O'Connor.

381 Colonial and Federalist American Literature [3]
The works of the first 200 years of American literature, including Edwards, Franklin, Irving, Cooper, and Bryant.

382 Literature of the American Renaissance [3]
The major writers of the American Renaissance (1830-1865), with emphasis on the works of Emerson, Thoreau, Hawthorne, Melville, Whitman, and Poe.

384 Literature of the Modern South: 1920 to the Present [3]
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 American Poetry of the Twentieth Century [3]
Major American poets of this century, with emphasis on the work of Robinson, Frost, Stevens, Williams, Pound, Crane, Eliot, and Lowell. A work of fiction which employs poetic techniques, such as Faulkner's The Sound and the Fury, may also be studied.

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]
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]
The American novel from the end of World War I to the present; the course includes the work of such authors as Fitzgerald, Hemingway, Faulkner, Dos Passos, Wolfe, Bellow, and Nabokov.

389 American Drama of the Twentieth Century [3]
American drama of the twentieth century, with special attention to the plays of Eugene O'Neill, Thornton Wilder, Arthur Miller, Tennessee Williams, and Edward Albee.

390 Recent American Literature [3]
Major American poets from World War II to the present, with emphasis on the work of such poets as Roethke, Wilbur, Dickey, Lowell, Merwin, Kinne1, and Ammons.

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

392 History of the English Language [3]
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.

393 Selections from the Literature of the Indian Continent [3]
Selected literary masterpieces in translation from the ancient and modern literatures of the Indian continent, including romances, plays, and poetry from Sanscrit, Hindi, Tamil, Irdu, and other literatures. (Course credit accepted for the BA non-Western proviso but not in the English major.)

394 Japanese Literature in Translation [3]
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]
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.

441, 442 Studies in English and American Literary Topics, Periods or Genres [3, 3]
Study in depth of a selected literary topic, period, or genre, as announced. These courses may be repeated with permission of the department.

444 Selected Major English and American Writers Before 1900 [3]
An intensive study of one or two major authors, such as Donne and Swift, or Melville and Twain, as announced. This course may be repeated with permission of the department.

448 Selected Major English and American Writers of the Twentieth Century [3]
An intensive study of one or two major twentieth century writers, such as Joyce, Faulkner, or Eliot and Yeats as announced. This course may be repeated with permission of the department.

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.

455 Literary Style [3]
The theory and practical analysis of English literary style. Several methodologies, including the impressionistic, the rhetorical, and the linguistic, will be examined, and then applied to the language of various literary texts, including essays, poems, and novels.

467 Advanced Expository Writing [3]
Theory and practice of advanced expository writing; practice in analyzing and writing essays, articles, and other expository forms.

469 Seminar in Creative Writing [3]
Prerequisite: Permission of the Instructor. Intensive practice in the technique of creative writing and study of the nature of the imagination in the creative process. 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, however, be counted toward the requirements for the English major.)

470 Independent Study [1-3]
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 substantial piece of written work during the semester on the findings of his research. (By permission of the department, the course may be taken a second time for a total maximum of six hours of 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.

202 Introduction to News Editing [3]
Prerequisite: Journalism 201. Techniques of copy editing, including copy preparation, headline writing, news judging, and newspaper makeup. Designed to introduce students to working on newspaper copy desks, but has applications for anyone preparing copy for publication.

210 Yearbook Laboratory [1]
Prerequisite or corequisite: Journalism 201. Practical experience at writing and editing for the student yearbook, coordinated with the instruction in Journalism 201. May be taken three semesters for a total of three credit hours.

211 Newspaper Laboratory [1]
Prerequisite or corequisite: Journalism 201. Practical experience at writing and editing for the student newspaper, coordinated with the instruction in Journalism 201. May be taken three semesters for a total of three credit hours.

212 Literary Magazine [1]
Supervised practical experience in editing, make-up, and reviewing for the University's literary magazine. Two hours per week. May be taken three semesters for a total of three credit hours.
Department of Fine and Performing Arts

Associate Professors Burt (Acting Chairman), Chabrowe
Assistant Professors Blomquist, Burton, Duffner, Kanyan, King, Quinn
Acting Assistant Professors Boxer, Turek
Instructors Braunlich, Romans, Schwarz, Tikoian
Lecturers Echard, Murphey, Von Barghahn, Williams

Requirements for the Major in Art
The major program in art prepares students for graduate study in studio art and art history, as well as for research and professional work in art.

In addition to the general requirements for the Bachelor of Arts degree, art majors must complete a minimum of 42 hours in art.

Required courses in art are as follows:

Introductory Drawing .......................... 6
Fundamentals of Design ........................ 3
Survey of Western Art .......................... 6
Painting, Sculpture or Intermediate Design .... 6
History of Nineteenth and Twentieth Century Art .. 6
Studio or Art History Electives .................. 15
Total .................................. 42

Sample Schedule for Art Majors

First Semester
English .......................... 3
Foreign Language ......................... 4
Fundamentals of Design .................... 3
Introductory Drawing ...................... 3
Survey of Western Art ...................... 3 16

Second Semester
English .......................... 3
Foreign Language ......................... 4
Math or Science .......................... 3
Introductory Drawing ...................... 3
Survey of Western Art ...................... 3 16

Third Semester
Literature .......................... 3
Foreign Language ......................... 4
Natural Science .......................... 4
Introductory Painting or Introductory Sculpture .... 3
History of Nineteenth and Twentieth Century Art .. 3 17

Fourth Semester
Literature .......................... 3
Natural Science .......................... 4
Intermediate Painting or Intermediate Sculpture .... 6
or Intermediate Design
or Intermediate Design
History of Nineteenth and Twentieth Century Art .. 3 16

Fifth Semester
Elective .......................... 4
Social and Behavioral Science .......... 3
Classical, Near Eastern, Medieval-Renaissance, Renaissance, Baroque Art; or Advanced Studio Arts .... 6 13

Sixth Semester
Elective .......................... 6
Social and Behavioral Science .......... 3
Classical, Near Eastern, Medieval-Renaissance, Renaissance, Baroque Art; or Advanced Studio Arts .... 6 15

Seventh Semester
Social and Behavioral Science .......... 3
Elective or Advanced Studio Art .......... 3
Elective or Senior Seminar in Art History .... 3
Elective or Classical, Near Eastern, Medieval-Renaissance, Renaissance, Baroque Art .......... 3 15

Eighth Semester
Social and Behavioral Science .......... 3
Elective or Classical, Near Eastern, Medieval-Renaissance, Renaissance, Baroque Art .......... 9 12

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Art Courses
101 Art Appreciation [3]
A general introduction to the principles of aesthetics in art by means of a study in painting, sculpture and architecture; chronological, prehistoric times to the present, or idealistic approach varying with the instructor. For non-art majors only.
103, 104 Introductory Drawing [3, 3]
Prerequisite: Art majors only or permission of instructor. Elementary course in representational drawing and expressive pictorial design. Emphasis upon the figure and basic principles of one and two point perspective. Six hours per week.
105 Fundamentals of Design [3]
Prerequisite: Art majors only or permission of instructor. Knowledge of basic art elements and principles gained through two-dimensional design problems which employ a variety of media. Six hours per week.
201, 202 Introductory Painting [3, 3]
Prerequisite: Art majors only or permission of instructor. A basic course in the fundamentals of painting. Structural approach in media of oil, acrylic, and tempera. Six hours per week.
203, 204 Intermediate Drawing [3, 3]
Prerequisites: Drawing 103 and 104 or permission of instructor. An intermediate course in drawing. Emphasis upon advanced exploration of techniques and approaches. Original compositions from the figure and nature supplemented by problems of personal and expressive drawing. Six hours per week.
205 Intermediate Design [3]
Prerequisites: Art 103 and 105 or permission of instructor. Continued exploration of design as a means of visual expression with three-dimensional emphasis. More individually structured problems in terms of materials, forms, composition, and meaning. Six hours per week.
215 Introductory Sculpture [3]
Prerequisite: Art 103 and 105 or permission of instructor. A basic course in the fundamentals of creating volumes, masses and planes based on the use of plastic earths. Basic techniques of subtraction, addition and manipulation processes will be explored. Six hours per week.
221, 222 Survey of Western Art [3, 3]
A survey of western art as expressed through architecture, sculpture and painting. First semester, prehistoric to Renaissance; second semester, Renaissance to the present.
223 Introduction to Comparative Arts [3]
An interdisciplinary approach to various themes within the history of western art.

224 Problems in Comparative Arts [3]
Prerequisite: Art 220, 223, or permission of instructor. Important aesthetic questions concerning the nature of subject matter, formal analysis and modes of operation within works of art and music are discussed.

301, 302 Intermediate Painting [3, 3]
Prerequisites: Art 201 and 202 or permission of instructor. A continuing study of painting with an emphasis on the development of individual style. Original compositions based upon still life, figure and nature supplemented by expressive painting. Choice of media. Six hours per week.

315 Intermediate Sculpture [3]
Prerequisites: Art 103, 105, and 215 or permission of the instructor. Continued exploration of sculpture problems with added emphasis on the individual’s creativity. Includes plastic earths and other materials capable of being modeled or carved. Methods of casting are also investigated. Six hours per week.

320 History of Ancient Near Eastern Art [3]
Prerequisite: Sophomore standing. Art of the Near East, Egypt, and the Aegean.

321, 322 History of Classical Art [3, 3]
Prerequisite: Sophomore standing. Architecture, sculpture and painting in the Classical cultures. First semester will stress Greece, second semester, Rome.

325, 326 Medieval and Early Renaissance Art [3, 3]
Prerequisite: Sophomore standing. Architecture, sculpture and painting from Early Medieval, Romanesque, Gothic and Early Renaissance periods.

327 History of Renaissance Art [3]
Prerequisite: Sophomore standing. Study of Renaissance principles of architecture, sculpture and painting and of their development and transformation through Mannerism.

328 History of Baroque Art [3]
Prerequisite: Sophomore standing. Study of the Baroque principles of architecture, sculpture and painting, and of their development and transformation through the Rococo.

331, 332 History of Nineteenth and Twentieth Century Art [3, 3]
Prerequisite: Sophomore standing. Painting, sculpture and architecture from the Neoclassical period to the art of the present day. First semester: The Nineteenth Century. Second semester: The Twentieth Century.

491, 492 Advanced Studio Problems [2-4, 2-4]
Prerequisite: Junior or senior standing in Art and permission of the instructor and art faculty. This course provides the opportunity for the individual student to develop advanced skills in drawing, painting, sculpture, and other media. Hours to be arranged.

493, 494 Independent Study in Art History [3, 3]
Prerequisite: Junior or senior standing in Art, permission of instructor and art faculty, plus 9 hours in art history, including Art 221, 222. Intensive study of a particular artist, period, or theoretical problem in art history or archaeology, to be conducted by an individual student in close consultation with an instructor.

495, 496 Senior Seminar in Art History [3, 3]
Prerequisite: Open only to senior majors in Art with consent of instructor. Intensive research on a specialized art historical or archaeological topic culminating in the production of a seminar paper. The subject will be determined by the instructor conducting the sections and may be obtained from him in advance.

Requirements for the Major in Dramatic Arts
The major program in dramatic arts prepares students for graduate study in performance, production, and criticism as well as for professional activities and research.

In addition to the general requirements for the Bachelor of Arts degree, dramatic arts majors must complete "Introduction to Theater Experience" (Dramatic Arts 160) plus a minimum of 39 hours in dramatic arts.

Required courses in dramatic arts are as follows:

- Introduction to Theater Experience ..................................... (3)
- Speech ................................................................................ (9)
- Acting .................................................................................. (4)
- Theater History .................................................................... (6)
- Technical Theater Production ............................................. (6)
- Directing .............................................................................. (3)
- Dramatic arts electives ....................................................... 11

Total .................................................................................... 39

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## Sample Schedule for Dramatic Arts Majors

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</tr>
<tr>
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<td>15</td>
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*Possibility non-western studies.

### Dramatic Arts Courses

#### 160 Introduction to the Theater Experience [3]
An overview of the theater as the composite art of playwright, director, actor, designer and technician; and an examination of the inter-relationship of play, physical theater, and audience through the study of representative plays of various periods of theater history. Required for dramatic arts majors but is not counted in credits required for a major.

#### 220 Acting I [3]
Prerequisite: Permission of the instructor. A laboratory-performance course. Essential and basic training in acting, emphasizing the actor's use of voice, movement, realistic motivation, and dramatic imagery. Required for dramatic arts majors.

#### 221 Body Movement [1]
A lecture-laboratory course. A development of the body movement emphasizing theatrical movement, theatrical dance, and mime. Required for dramatic arts majors. Three hours per week.

#### 241, 242 Technical Theater Production [3, 3]
Prerequisite: Theater 160 or permission of instructor. A lecture-laboratory course. Studies of the technical aspects of theater production. Emphasis in the first semester is on set building and painting, and on the basics of lighting. Emphasis in the second semester is on costume building and makeup. Required for dramatic arts majors.

#### 256 Oral Interpretation I [3]
Prerequisite: Speech 151 or permission of instructor. A lecture-performance course. Principles involved in oral communication of the written word in its intellectual, emotional and aesthetic entirety. Practice in the oral communication of prose. Required for dramatic arts majors.

#### 258 Oral Interpretation II [3]
Prerequisite: Oral Interpretation I. A lecture-performance course. The oral interpretation of poetry and drama. Intensive study of voice and articulation. Regular practice in solo and group interpretation. Advanced study in the oral interpretation of the written word, with emphasis on poetry and drama; detailed analysis of voice production and articulation of sounds, with vocal exercises; solo interpretation, group interpretation, and regular oral practice in both. Required for dramatic arts majors.

#### 261 Argumentation and Debate [3]
Prerequisite: Speech 151 or permission of instructor. The principles and techniques of argumentative speaking: analysis of debate propositions, research, evidence, forms of argument, fallacies, refutation and rebuttal. Lecture, discussion and classroom debate.

#### 325, 326 Private Acting Instruction [1, 1]
Prerequisite: Consent of the dramatic arts faculty. Each student will be assigned a one-hour private session each week with an actor-coach. During these sessions the student is expected to further refine his/her acting techniques in the special competency of the actor-coach. The private instruction fee applies.

#### 340 Play Production Laboratory [1-3, Maximum credit 3]
Prerequisite: Permission of instructor. Practicum. Supervised production work on the level of crew head, assistant director, stage manager, designer, director, or producer. Eighty-five hours of production work per credit hour.

#### 351, 352 Survey of the History of the Theater [3, 3]
Prerequisite: Drama 160. A lecture course in the development of the theater from its beginnings to the present, with reference to theatrical movements, playwrights, producers, designers, actors, and companies. Emphasis on the social, cultural, and philosophical factors shaping the theater in successive historical periods. Major emphasis will be on western theater, but non-western theaters will also be studied. Required for dramatic arts majors.

#### 355, 356 Private Directing Instruction [1, 1]
Prerequisite: Consent of the dramatic arts faculty. Each student will be assigned a one-hour private session each week with a director-coach. During these sessions the student is expected to further refine his/her directing techniques in the special competency of the director-coach. The private instruction fee applies.

### Speech Courses

#### 151 Principles of Effective Speaking [3]
An introduction to the techniques of effective oral presentation, emphasizing impromptu and extemporaneous speaking. Required for dramatic arts majors.

#### 152 Public Speaking [3]
Prerequisite: Speech 151. 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 conferences, with development of participant and leadership skills. Preliminary study of group dynamics. Participation in practice conferences.

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Requirements for the Major in Music
The two music degree programs prepare students for graduate work in music and music literature, for research and professional work in musical activities, and for state certification to teach music on the elementary and secondary levels. Entrance to all music degree programs is by audition only. Auditions will normally be held on the first Friday of the following months: November, February, March, April, May, and August. Transfer students are required to take competency placement tests.

At the University, students seeking certification to teach music on the elementary and secondary levels must earn the Bachelor of Music degree. Music students applying for admission to the teacher education program must meet the requirements of the Teacher Education Committee and, in addition, must be recommended by the music faculty to the Teacher Education Committee. For students who have earned a baccalaureate degree and who are seeking state certification to teach music, this recommendation will normally be made contingent upon completion of the sequence of courses listed under "Bachelor of Music—Virginia Certification to Teach Music." It should be noted that the elective courses which occur under General Education, Music Electives, and Free Electives in the Bachelor of Music degree program are used in the "Virginia Certification to Teach Music" sequence to fulfill state certification requirements and the University's requirements.

Bachelor of Arts. In addition to the general degree requirements for the Bachelor of Arts degree, music majors must complete a minimum of 42 hours in music. A total of 120 semester hours are required for the Bachelor of Arts degree in music.

Required courses in music are as follows:

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<th>Course</th>
<th>Hours</th>
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<tr>
<td>Harmony I, II, III, IV</td>
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<tr>
<td>Keyboard Harmony</td>
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</tr>
<tr>
<td>Sight Singing and Ear Training I, II</td>
<td>4</td>
</tr>
<tr>
<td>Historical, Theoretical, and Analytical Study of Music</td>
<td>9</td>
</tr>
<tr>
<td>Class Piano I, II</td>
<td>2</td>
</tr>
<tr>
<td>Major Instrument or Voice (Private Music Instruction)</td>
<td>8</td>
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<tr>
<td>Ensemble</td>
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Sample Schedule, Bachelor of Arts with a Major in Music

**First Semester**
- English 101                                    3
- Foreign Language 151                           4
- Harmony I                                     3
- Sight Singing and Ear Training I              2
- Class Piano I                                 1
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Second Semester**
- English 102                                   3
- Foreign Language 152                           4
- Harmony II                                    3
- Sight Singing and Ear Training II             2
- Class Piano II                                1
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Third Semester**
- English Literature                            3
- Foreign Language 251                           4
- Natural Science                               3
- Harmony III                                   3
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Fourth Semester**
- English Literature                            3
- Natural Science                               4
- Survey of World Music Literature              3
- Harmony IV                                    2
- Keyboard Harmony                              1
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Fifth Semester**
- Behavioral Science                            3
- Mathematics or Science Elective                3
- Humanities Elective                           3
- Historical, Theoretical, and Analytical Study of Music | 3
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Sixth Semester**
- Behavioral Science                            3
- Social Science                                3
- Humanities Elective                           3
- Historical, Theoretical, and Analytical Study of Music | 3
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1

**Seventh Semester**
- Social Science                                3
- Historical, Theoretical, and Analytical Study of Music III | 3
- Major Instrument or Voice (Private Music Instruction) | 1
- Ensemble                                     1
- Electives                                    9

**Eighth Semester**
- Historical, Theoretical, and Analytical Study of Music IV | 3
- Major Instrument or Voice (Private Music Instruction) | 1
- Electives                                    10

**Total**                                      | 15

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Bachelor of Music. A total of 130 semester-hours are required for the Bachelor of Music degree. The requirements by area are as follows:

**General Education**
- English 101 and 102 .................................. 6
- English Literature .................................. 6

Courses Outside the Fine and Performing Arts .................................. 12
- Non-Music Courses .................................. 8 32

**Basic Musicianship**
- Harmony I, II, III, IV .................................. 11
- Keyboard Harmony .................................. 1
- Sight Singing and Ear Training I, II ................. 4
- Survey of World Music Literature .................. 3

**Historical, Theoretical, and Analytical Study**
- of Music I, II, III, IV .................................. 12
- Class Composition and Arranging I ................. 3
- General Conducting .................................. 2
- Class Piano I, II .................................. 2
- Major Instrument or Voice (Private Music Instruction) .................. 12
- Ensemble .................................. 8 58

**Music Electives** .................................. 18 18

**Free Electives** .................................. 22 22

Total hours .................................. 130

---

1. The first three hours in this sequence (Music 3351) may be applied toward the non-Western Proviso under General Requirements. Music 231 (Survey of World Music Literature) also meets the non-Western requirement.
2. Courses from the College of Arts and Sciences only.
3. Students may choose electives from any or all of the following areas:
   - Music History
   - Ethnomusicology
   - Theory
   - Composition
   - Performance
   - Music Education (courses taught by the Department of Fine and Performing Arts)

---

### Sample Schedule, Bachelor of Music

**First Semester**
- English 101 .................................. 3
- Foreign Language or Non-Music Elective .................. 4
- Harmony I .................................. 3
- Sight Singing and Ear Training I ......................... 2
- Class Piano I .................................. 1
- Major Instrument or Voice (Private Music Instruction) .................. 2
- Ensemble .................................. 1 16

**Second Semester**
- English 102 .................................. 3
- Foreign Language or Non-Music Elective .................. 4
- Harmony II .................................. 3
- Sight Singing and Ear Training II ......................... 2
- Class Piano II .................................. 1
- Major Instrument or Voice (Private Music Instruction) .................. 2
- Ensemble .................................. 1 16

**Third Semester**
- English Literature .................................. 3
- Harmony III .................................. 3
- Major Instrument or Voice (Private Music Instruction) .................. 1
- Ensemble .................................. 1
- Non-Fine and Performing Arts Elective .................. 3
- Free Electives .................................. 6 17

**Fourth Semester**
- English Literature .................................. 3
- Harmony IV .................................. 2
- Keyboard Harmony .................................. 1
- Survey of World Music Literature .................. 3
- Major Instrument or Voice (Private Music Instruction) .................. 1
- Ensemble .................................. 1
- Non-Fine and Performing Arts Elective .................. 3
- Free Elective .................................. 3 17

**Fifth Semester**
- Historical, Theoretical, and Analytical Study of Music I .................. 3
- Class Composition and Arranging I ......................... 3
- General Conducting .................................. 2
- Major Instrument or Voice (Private Music Instruction) .................. 1
- Ensemble .................................. 1
- Music Elective .................................. 3
- Non-Fine and Performing Arts Elective .................. 3 16

**Sixth Semester**
- Historical, Theoretical, and Analytical Study of Music II .................. 3
- Major Instrument or Voice (Private Music Instruction) .................. 1
- Ensemble .................................. 1
- Music Electives .................................. 6
- Non-Fine and Performing Arts Elective .................. 3
- Free Elective .................................. 3 17

**Seventh Semester**
- Historical, Theoretical, and Analytical Study of Music III .................. 3
- Major Instrument or Voice (Private Music Instruction) .................. 2
- Ensemble .................................. 1
- Music Elective .................................. 3
- Free Electives .................................. 6 15

**Eighth Semester**
- Historical, Theoretical, and Analytical Study of Music IV .................. 3
- Major Instrument or Voice (Private Music Instruction) .................. 2
- Ensemble .................................. 1
- Music Electives .................................. 6
- Free Electives .................................. 4 16

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### Bachelor of Music with Virginia Certification to Teach Music

A total of 140 semester hours are required for the Bachelor of Music with Virginia Certification to teach music. The requirements by area are:

- **General Education**
  - English 101 and 102: 6
  - English Literature: 6
  - History 121 or 122: 3
  - Social and/or Behavioral Science: 9
  - Laboratory Science: 8

- **Basic Musicianship**
  - Harmony I, II, III, IV: 11
  - Keyboard Harmony: 1
  - Sight Singing and Ear Training I, II: 4
  - Survey of World Music Literature: 3
  - Historical, Theoretical, and Analytical Study of Music I, II, III, IV: 12
  - Class Composition and Arranging I: 3
  - General Conducting: 2
  - Class Piano I, II: 2
  - Major Instrument or Voice (Private Music Instruction): 12
  - Ensemble: 7
  - Laboratory Ensemble: 1

- **Music Electives**
  - Laboratory Ensemble: 1
  - Class Instruments/Voice: 8
  - Choral or Instrumental Conducting: 2
  - Improvisation: 1
  - Music Methods: 6

- **Free Electives**
  - Mathematics: 6
  - Human Growth and Development: 6
  - Foundations of Education: 3
  - Educational Psychology: 3
  - Health 210: 3
  - Modern Dance: 1

- **Additional Requirements**
  - Student Teaching: 9
  - Physical Education: 1

Total hours: 140

---

### Sample Schedule, Bachelor of Music (With Virginia Certification to Teach Music)

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1. The General Education courses and the Free Electives are derived from the state certification requirements as outlined under the Department of Education.
2. Courses from the College of Arts and Sciences only.
3. **Vocal Emphasis** (for students whose major instrument is voice, piano, organ, or guitar). The following two courses are required: Class Voice I and Class Guitar. Six credits must be chosen from the following: Class Strings: Violin and Viola; Class Strings: Cello and String Bass; Class Woodwinds: Flute and Clarinet; Class Woodwinds: Oboe and Bassoon; Class Brass; Class Percussion; Private Music Instruction (maximum of two credits, must be on an instrumental other than the major instrument).
4. **Instrumental Emphasis** (for students whose major instrument is a wind, percussion, or orchestral string instrument). The following courses are required: Class Voice I, Class Guitar; Class Strings: Violin and Viola; Class Strings: Cello and String Bass; Class Woodwinds: Flute and Clarinet; Class Woodwinds: Oboe and Bassoon; Class Brass; Class Percussion.
5. **Music 461 and 462, 463, or 464, or Music 462 and 463 or 464**
6. **May not be used to satisfy the 130 credit hours required for the Bachelor of Music degree.**
Music 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 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. Matching tones, major and minor scales, key signatures, intervals, rhythm, treble, bass, alto and tenor clefs, Rhythmic and melodic dictation. Three hours per week.

114 Sight Singing and Ear Training II [2]
Prerequisite: Music 113 or permission of instructor. A continuation of Sight Singing and Ear Training I, Modulation, various modes, 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 choral style.

116 Harmony II [3]
Prerequisite: Music 115 or permission of 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.

151 Class Strings: Violin and Viola [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the violin and viola. A survey of instructional materials, and bow and instrument selection. Two hours per week.

152 Class Strings: Cello and String Bass [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the cello and string bass. A survey of instructional materials, and bow and instrument selection. Two hours per week.

153 Class Woodwinds: Flute and Clarinet [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the flute and clarinet. A survey of instructional materials, and mouthpiece and instrument selection. Two hours per week.

154 Class Woodwinds: Oboe and Bassoon [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the oboe and bassoon. A survey of instructional materials, instruction selection, and reed adjustment. Two hours per week.

155 Class Brass [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the brass instruments. A survey of instructional materials, and mouthpiece and instrument selection. Two hours per week.

156 Class Percussion [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the percussion instruments. A survey of instructional materials and instrument selection. Two hours per week.

157 Class Guitar [1]
Prerequisite: Non-music majors must have permission of instructor. A study of techniques of playing and teaching the guitar. A survey of instructional materials and instrument selection. Two hours per week.

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 instructor. The study of the piano keyboard as it is related to intermediate song and combined in various musical forms. For music majors only.

173, 174, 273, 274, 373, 374, 473, 474 Private Music Instruction [1, 1, 1, 1, 1, 1, 1, 1]

177, 178, 277, 278 Private Music Instruction [1, 1, 1, 1, 1]

175, 176, 275, 276, 375, 376, 475, 476 Private Music Instruction [2, 2, 2, 2, 2, 2, 2, 2]

377, 378, 477, 478 Private Music Instruction [3, 3, 3, 3]
Prerequisites and Corequisites: Prerequisite for Music 173, 177, and 175: Audition; for Music 377: eight credits on the major instrument and approval by an audition committee; corequisite for Music 378: Music 380; corequisite for Music 478: Music 480. To earn one credit per semester, a student takes 14 one-half hour private music lessons; to earn two or three credits per semester, a student takes 14 one-half private music lessons. The following amount of practice is expected each day: one credit—50 minutes; two credits—one hour and 40 minutes; three credits—two and one-half hours. As part of the repertoire requirement for this course, each student must attend at least 75 percent of all music programs sponsored by the Department of Fine and Performing Arts. Instruction is offered on the following:

- Flute
- Trombone
- Percussion
- Oboe
- Baritone Horn
- Piano
- Clarinet
- Tuba
- Organ
- Bassoon
- Violin
- Harp
- Saxophone
- Violino
- Classic Guitar
- French Horn
- Cello
- Voice
- Trumpet
- String Bass

The Private Music Instruction Fee applies.
181 University Chorus \{1,1,1,1,1,1,1\}
Performance of works from the choral repertoire. Public concerts will be given. May be taken for credit eight times. Three hours per week.

183 Symphonic Winds \{1,1,1,1,1,1,1\}
Open to all students in the University who possess a reasonable amount of performing ability. Performance of works from the band repertoire. Public concerts will be given. May be taken for credit eight times. Three hours per week.

185 Laboratory Ensemble \{1,1\}
Prerequisite: One semester of class instrumental instruction on a band or orchestra instrument. A vocal and instrumental ensemble for music majors seeking state certification as music teachers designed to provide opportunities for performance on secondary instruments and voice, and to serve as a laboratory for conducting, methods and materials, and composition and arranging classes. For music majors only. May be taken for credit two times. Three hours per week.

187 Chamber Orchestra \{1,1,1,1,1,1,1,1\}
Performance of works from the symphonic repertoire. Public concerts will be given. May be taken for credit eight times. Three hours per week.

189 Jazz Ensemble \{1,1,1,1,1,1,1\}
Prerequisite: Audition. A performing ensemble intended to provide the student with practical experience in the various aspects of jazz performance—section work within a large aggregation, combo work, and improvisation. May be taken for credit eight times. Three hours per week.

203 Folk and Traditional Music of the World \{3\}
A study of the musical structure and cultural setting of folk music among diverse people, with an introduction to the traditional art music of Asian countries. For non-music majors only.

204 Introduction to Twentieth-Century Music \{3\}
Prerequisite: One course in music or permission of instructor. A survey of the various styles found in twentieth-century music. Tonal, atonal, serial and experimental music will be studied. For non-music majors only.

206 Music in the United States \{3\}
A study of music in the United States from Colonial times to the present. Through interaction with actual musical examples, the student will trace significant African and European influences on the emerging musical style and artistic activity in the United States.

208 Latin American Music \{3\}
A survey of folk, popular, and artistic music of Latin American countries in a historical setting. Influences of other cultures on the musical life of representative countries will be viewed.

207 The Development of Jazz \{3\}
Prerequisite: One course in music or permission of instructor. An historical, analytical and aural survey of jazz from its inception to the present day, designed to provide an understanding of the basic aesthetic and technical features, the course of their development and an acquaintance with important artists in the field. Attention is also given to important hybrid trends resulting from the synthesis of jazz with other musical idioms. For non-music majors only.

215 Harmony III \{3\}
Prerequisite: Music 116 or permission of 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 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 215 or permission of instructor. A survey of music literature in the four major theoretical systems of the world with emphasis on the influences of non-Western systems on Western music.

233 Introduction to Music Education \{3\}
Prerequisite: Open to music majors or others by permission of instructor. Basic tenets of aesthetic education and their application to teaching-learning processes in music. Organization of music education in public and private elementary and secondary schools, higher education, the community, and the private studio. Includes resources and materials in music education.

277 Class Voice I \{1\}
A study of the human voice in artistic singing. Practical application of basic principles will be emphasized. Two hours per week.

278 Class Voice II \{1\}
A continuation of voice study begun in Music 277, with emphasis on artistic singing in several styles. Two hours per week.

285 Chamber Ensembles \{1,1,1,1,1,1\}
Prerequisite: Open to all students in the University. Performance of works from the chamber music repertoire. Public concerts will be given. May be taken for credit six times. Three hours per week.

319 Class Composition and Arranging I \{3\}
Prerequisite: Music 216 or permission of instructor. Students are encouraged to exercise their creative powers through the writing of original compositions for specified instruments, voices or combinations. They then apply compositional principles to the creative arrangement of existing music of various styles.

320 Class Composition II \{3\}
Prerequisite: Music 319 or permission of instructor. The compositional skills acquired in Class Composition and Arranging I are applied to larger forms of music and larger ensembles, with emphasis on twentieth-century techniques.

335 Historical, Theoretical, and Analytical Study of Music I \{3\}
Prerequisite: Music 216 and 231 or permission of instructor. A survey of the development of music form from the ancient times of the Mesopotamians, the Assyrians, and the Egyptians. The influences of these systems and their instruments are studied in the music of early churches: the Hebrew music in the temples and the spread to the Eastern churches including Byzantine, Coptic, Abyssinian, and Armenian music. These roots are traced to the 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\}
Prerequisite: Music 216 and 231 or permission of 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.

379 Improvisation \{1\}
Prerequisite: Music 216 and 218 or permission of instructor. Students are taught to apply the techniques of improvisation used in the various periods of music history on their major instruments and the piano. Two hours per week.

380 Junior Recital \{1\}
Corequisite: Music 378. A public recital given by students during their junior year.

385 Collegium Musicum \{1,1,1,1\}
Prerequisite: Successful completion of an audition before the instructor. The discovery, interpretation and performance of vocal, choral and instrumental music from the historical repertoire. Emphasis will be placed on bringing to the university community those musical compositions which are not readily accessible in the regular concert repertoire. May be taken for credit four times. Three hours per week.

391 General Conducting \{2\}
Prerequisite: Music 172, 216 and 218 or permission of instructor. A study of basic techniques of conducting a musical ensemble. Three hours per week.

392 Choral Conducting \{2\}
Prerequisite: Music 391. An advanced conducting course emphasizing the techniques of bringing a choral singing group to concert standard. Consideration will be given to the interpretation of repertoire from all historical periods. Three hours per week.

394 Instrumental Conducting \{2\}
Prerequisite: Music 391. An advanced conducting course emphasizing the techniques of bringing an orchestra or wind ensemble to concert standard. Consideration will be given to the interpretation of repertoire from the applicable historical periods, including transposition and score reading. Three hours per week.
436 Historical, Theoretical, and Analytical Study of Music III [3]
Prerequisite: Music 216 and 231 or permission of instructor. A study of the development of music in Western civilization from the late Baroque through early Romanticism, with emphasis upon historical, theoretical, and analytical aspects.

437 Historical, Theoretical, and Analytical Study of Music IV [3]
Prerequisite: Music 216 and 231 or permission of instructor. A study of the development of styles of music in Western civilization from the works of the late Romantic composers through the present day avant-garde compositions, with emphasis upon historical, theoretical, and analytical aspects.

445 Bibliography and Research Techniques [3]
Prerequisite: Open only to music majors with senior standing and two of the following courses: Music 335, 336, 435, 436 and permission of the instructor and the music faculty. A study of basic reference materials in music, as well as the investigation and application of various research principles.

461 The Teaching of General Music in the Elementary School [3]
Prerequisites/Corequisites: Music 114, 216, 218, 392 (or 394) and Education 301 and 313. A study of theory, methods, practice, and materials involved in the teaching of general music in the elementary school. Emphasis is placed on developing effective teaching-learning activities designed to build musical understanding through the acquisition of knowledge, understanding, and skills centering on the structure of music. Field experiences in the public schools are required. For music majors only.

Prerequisites/Corequisites: Music 114, 216, 218, 392 (or 394) and Education 301 and 313. A study of theory, methods, practices, and materials involved in the teaching of general music in the secondary school. Emphasis is placed on philosophical foundations, the development of objectives, evaluation of student progress, motivational techniques, and materials. Field experiences in the public schools are required. For music majors only.

463 The Teaching of Vocal Music in the Secondary School [3]
Prerequisites/Corequisites: Music 114, 216, 218, 392 (or 394) and Education 301 and 313. A survey of repertoire and methods for teaching high school choral groups, small ensembles and voice classes. Problems of diction, interpretation, tone production, intonation, phrasing, rehearsal techniques, style characteristics and administration. Field experiences in the public schools are required. For music majors only.

Prerequisites/Corequisites: Music 114, 216, 218, 392 (or 394) and Education 301 and 313. A study of theory, methods, practices, and materials involved in the teaching of instrumental music at the elementary and secondary school levels. Emphasis is placed on philosophical foundations, the development of objectives, evaluation of student progress, recruiting techniques, and management of the various phases of the instrumental music program. Field experiences in the public schools are required. For music majors only.

480 Senior Recital [1]
Corequisite: Music 478. A public recital given by students during their senior year.

495 Workshop in Italian Vocal Music (Applied Music) [3]
Prerequisite: Audition. The study and practice of Italian vocal music with stress on enunciation and inflection as is basic to Italian Chamber Music and Opera. The development of the sensitivity to the genre through the acquired knowledge of background source material. Private and ensemble coaching.

496 Seminar in Ethnomusicalological Area Studies [3, 3, 3]
Prerequisite: Open only to music majors with junior or senior standing and Music 231, 216 or permission of the instructor and the music faculty. Intensive research on a specialized ethnomusicalological topic culminating in a seminar paper. The areas and subject under study will be determined by the instructor conducting the section and may be obtained from him/her in advance. The course may or may not require travel to the area under study. (If travel is required, each student will finance his/her own way.) May be taken for credit four times provided a different area or subject is researched each time. Three lecture hours or the equivalent thereof.

497, 498 Independent Study [3, 3]
Prerequisite: Open only to music majors with senior standing and two of the following courses: Music 335, 336, 435, 436 and permission of the instructor and the music faculty. Individual research and study of a selected subject in close consultation with an instructor. A student may choose from the musico logical, ethnomusicalological, theoretical, compositional, or educational areas of music, and is to produce at least one major written work based on the findings of his research.

Dance Courses

101 Dance Appreciation [3]
An introduction to dance as a cultural art form. The elements of dance are examined separately and as combined in various dance forms. A brief survey of the basic forms leads into a more intensive study of modern and the new dance. Criticism and evaluation to be stressed.

121 Introduction to Studio Dance I [1]
An elementary level exploration in the mechanics of movement and motion in dance approached through techniques, aesthetics, and creativity. Three hours per week.

122 Introduction to Studio Dance II [1]
Prerequisite: Dance 121 or permission of instructor. A continuation of exploration in the mechanics of movement and motion in dance. Emphasis on the development of techniques for modern dance training. Three hours per week.
Department of Foreign Languages

Professor Willis
Associate Professors Aguera, Cordero, Elstun (Chairman),
Font, Tedder (on leave 1974-75)
Assistant Professors Brooks, Bufill, Evans, Hazera, Hecht,
Hobson, LePage, Meyer, Sehrt
Instructors Ursa, Wekerle
Lecturers Chaves, Layman, Powers, Simons, Villavicencio

General Aims and Guidelines
Courses in the Department of Foreign Languages are designed to meet the needs of several categories of students. A major is provided in French, German and Spanish for those who wish to build a liberal education around the intensive study of a foreign language, literature and culture; those who plan to undertake graduate study in these fields and those who intend to become foreign language teachers, professional translators, interpreters, and foreign correspondents.

Elective courses are provided on several levels for those who wish to acquaint themselves with the language, culture, literature and worlds of thought outside their own environment; for those majoring in disciplines that require the knowledge of one or more foreign language; and for those who recognize that the knowledge of a foreign language combined with other professional interests in business and industry will enhance employment opportunities and advancement. These elective courses are Classics 250, French 252 through 257, German 252 through 255, Russian 252, 254, 275, 311 and 353, Spanish 252 through 258, 316 and French, German, and Spanish 325. Proficiency in the foreign language is not required for Classics 250, Russian 275 and 353, French, German and Spanish 325 and Spanish 316, since these courses are taught in translation.

Elementary and intermediate courses are offered in French, German, Latin, Portuguese, Russian and Spanish, which may be used to fulfill the university's foreign language area requirement for the B.A. degree. These courses are also designed to broaden the student's general educational background and strengthen his awareness of the intrinsic value of language and linguistic heritage. The language laboratory complements the oral and written work of the classroom with tapes, drills, exercises and cultural materials.

Requirements for the Major in French
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.

To major in French, a student should have at least a "C" average in his previous French courses. Twenty-seven hours of work in French courses at the 300 and 400-levels are required for completion of the major. It is recommended that the student also take related courses in history, philosophy, humanities and linguistics.

Sample Schedule for French Majors

First Semester
French 151
Natural Science
English Composition
Social or Behavioral Science

Second Semester
French 152
Natural Science
English Composition
Social or Behavioral Science
Music 101 or 203 or Art 101

Third Semester
French 251
English Literature
Mathematics or a Science
Non-Western Culture
Social or Behavioral Science

Fourth Semester
Any course in 252-series except 257
English Literature
Non-Western Culture
Social or Behavioral Science

Fifth Semester
French 351 or 353
French 361 or 375
French 377
English 391
Music or Philosophy

Sixth Semester
French 354
French 362 or 376
French 378
English 392
Philosophy

Seventh Semester
Art, or English 397, 399, 431, 451 or History (European or French)
French 411 or 415
French 419 or 423
French 427 or 433

Eighth Semester
Art or English 398 or 430
French 412 or 416
French 419 or 423
French 434

http://catalog.gmu.edu
French Courses

151, 152 Elementary French [4, 4]
Intensive introduction to French, including basic grammar, aural training, the development of oral skills and reading proficiency. Introduction to the life and culture of French-speaking countries through selected readings, and programs in the language laboratory. Four classroom hours, two laboratory hours per week. 151 and 152 must be taken in sequence.

Intensive review of elementary French designed for students who have had two years of secondary school French but whose level of proficiency does not qualify them for French 251. Introduction to the life and culture of French-speaking countries through selected readings, and programs in the language laboratory. Students may not receive credit for both French 151, 152 and 153. Four classroom hours, two laboratory hours per week.

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; continued study of the life and culture of French-speaking countries. Four classroom hours, two laboratory hours per week.

252 to 257. Application and expansion of the language skills acquired in French 151 through 251 in one or more of the following subject areas. These courses may be taken 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 Texts [3]
Prerequisite: French 251 or equivalent. Reading and translation of selected texts in various fields, including the natural and social sciences; introduction of general scientific terminology. Recommended also for non-major students preparing for a graduate reading examination in French.

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.

257 Readings in French Literature [3]
Prerequisite: French 251 or permission of instructor. Readings of French literary works in the original language with all lectures, discussions, and examinations in English. Recommended for non-major students.

325 Major French Writers [3]
May not be taken in fulfillment of requirements for the major in French. Study of the works of a major French writer (e.g., Camus, Sartre, Beckett) in translation, with all course work in English. The writer to be studied will vary and will be announced in each semester's Schedule of Classes.

320 Writers of French-Speaking Africa and the West Indies [3]
Prerequisite: French 251 or permission of instructor. A selection of poems, plays, tales and novels expressing the culture and aspirations of the people of North and West Africa and the Caribbean, as presented by such authors as Senghor, Cesaere, Dadel, Sembene and Yacine.

351 Advanced French Grammar [3]
Prerequisite: French 251 or permission of instructor, Offered every year. 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 instructor. Written and oral reports and conversation on political, literary and artistic topics and current events.

361, 362 Applied French Linguistics [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of the instructor. Offered in alternate years. A course in phonetics, phonemics, morphemics and syntax of modern standard French. Three classroom hours per week, laboratory sessions at the discretion of the instructor.

375, 376 French Culture and Civilization [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of instructor, Offered in 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: Fifteen semester-hours of French or permission of instructor. Offered in alternate years. 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.

381 Explication de Textes [3]
Prerequisite: Six semester-hours of French at the 300-level or permission of instructor. Offered in alternate years. A structured approach to the reading and analysis of French literary texts.

411, 412 French Literature of the Twentieth Century [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of instructor, Offered in alternate years. 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.

419, 416 French Literature of the Nineteenth Century [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of instructor, Offered in alternate years. A study of the Classical period. 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: Fifteen semester-hours of French or permission of instructor. Offered in alternate years. The study of Voltaire, Montesquieu, Rousseau and Diderot, whose major writings reflect the political, philosophical, social and artistic ideas of "L'age des Lumières."

423, 424 French Literature of the Seventeenth Century [3, 3]
Prerequisite: Fifteen semester-hours of French or permission of instructor. Offered in alternate years. 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 literature, ideological and social currents in France from the Age of the Baroque to the Querelle des Anciens et des Modernes.

425, 426 Independent Study [1-3, 1-3]
Prerequisite: senior standing as a major in French and permission of the department chairman. Research and analysis of a selected problem in literature or linguistics in consultation with a member of the depart- ment. A maximum of 6 hours of independent study may be applied to fulfillment of requirements in the major.

427 French Literature of the Renaissance [3]
Prerequisite: Fifteen semester-hours of French or permission of instructor. Offered in alternate years. Renaissance and 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.

434 Prosaminar [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.

497, 498 Senior Honors Tutorial [3, 3]
Prerequisite: senior standing as a major in French, with an overall grade point average of 3.0 and 3.0 in the major field. Students who meet these requirements will be admitted to candidacy upon submission of a letter of application to the departmental Honors Committee in the second half of the junior year, supported by a faculty recommendation and an interview by and with the approval of the Honors Committee. In the first semester, weekly meetings with a faculty member to discuss readings from a comprehensive list prepared by the French faculty. In the second semester, independent research and completion of an honors essay under the supervision of a member of the French faculty.
Requirements for the Major in German
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.

To major in German a student should have at least a "C" average in previous German courses. German 254 is a prerequisite for all courses in the major program. Twenty-seven hours of work in German courses at the 300 and 400 levels are required for completion of the major. Students are urged to include Philosophy 231, 232, History 314 and English 391 among their electives.

German Courses

\textbf{151, 152 Elementary German \{4, 4\}}
Intensive introduction to German, including basic grammar, aural training, the development of oral skills and reading proficiency. Introduction to the life and culture of German-speaking countries through selected readings and programs in the language laboratory. Four classroom hours and two laboratory hours per week. 151 and 152 must be taken in sequence.

\textbf{153 Review of Elementary German \{4\}}
An intensive review of elementary German designed for students who have had two years of secondary school German but whose level of proficiency does not qualify them for German 251. Introduction to the life and culture of German-speaking countries through selected readings and programs in the language laboratory. Four classroom hours, two laboratory hours per week. Students may not receive credit for both 151, 152 and 153.

\textbf{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; continued study of the life and culture of German-speaking countries. Four classroom hours, two laboratory hours per week.

252 to 255: Application and expansion of the language skills acquired in German 151 through 251, in one or more of the following subject areas. These courses may be taken singly, concurrently, or in any order.

\textbf{252 German Conversation and Composition \{3\}}
Prerequisite: German 251 or equivalent. Development of oral proficiency and writing skills through discussions, reports and compositions on contemporary German events and culture.

\textbf{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.

\textbf{254 Readings in German Literature \{3\}}
Prerequisite: German 251 or equivalent. Introduction to German literature through a study of poetry, prose and dramas by major authors of the modern era (e.g., Brecht, Boll, Hesse, Mann). Preparation for the analysis of literature in German, including familiarization with the tools of German literary criticism. Prerequisite for all German courses in the major program.

\textbf{255 Masterpieces of German Literature \{3\}}
Prerequisite: German 251 or equivalent. A course for non-majors, providing study of selected literary works from 1800 to the present (Goethe, Heine, Kafka, Mann, Brecht, Durrenmatt). Works will be read in the original and discussed in English.

\textbf{311 Advanced German Grammar \{3\}}
Prerequisite: German 254 of permission of instructor. A systematic approach to the grammar of modern German. The theoretical knowledge will be applied in closely guided and supervised written and oral exercises.
312 Practical Stylistics [3]
Prerequisite: German 254 of permission of instructor. Presentation of the main stylistic and idiomatic features of German. Practice of these features (synonyms, idiomatic expressions, different levels of style, etc.) in closely guided and supervised exercises.

313, 314 Advanced Conversation and Composition [3, 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.

325 Major German Writers [3]
Study of the works of a major German writer (e.g., Hesse, Kafka, Grass, Frisch) in translation, with all course work in English. The writer to be studied will vary and will be announced in each semester's Schedule of Courses.

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 F.T.A. Hoffmann, as well as their collections of folk songs and tales.

370 German Literature From the Decline 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, Mayer, and Fontane will be read and discussed.

405, 406 The Age of Goethe (1750-1830) [3]
Prerequisite: German 254 or permission of instructor. The Work of Goethe, his predecessors and contemporaries will be studied in its historical setting and in the context of its current revival. 405: Lessing, Lenz, Schiller, Kleist and Holderlin. 406: Goethe.

411, 412 German Literature Since 1880 [3, 3]
Prerequisite: German 254 or permission of instructor. 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 currents 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. Study of the German language introducing the principles of modern linguistics. Analysis of German 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: senior standing as a major in German and permission of the department chairman. Research and analysis of a selected problem in literature or linguistics in consultation with a member of the department. A maximum of six hours of independent study may be applied to fulfillment of requirements in the major.

497, 498 Senior Honors Tutorial [3, 3]
Prerequisite: senior standing as a major in German, with an overall grade point average of 3.0 and 3.0 in the major field. Students who meet these requirements will be admitted to candidacy upon submission of a letter of application to the departmental Honors Committee in the second half of the junior year, supported by a faculty recommendation and an interview by and with the approval of the Honors Committee. In the first semester, weekly meetings with a faculty member to discuss readings from a comprehensive list prepared by the German faculty. In the second semester, independent research and completion of an honors essay under the supervision of a member of the German faculty.

Latin Courses
101, 102 Elementary Latin [3, 3]
Introduction to Latin, including basic grammar and the development of reading skills; introduction to Latin literature and Roman civilization. Three classroom hours and one laboratory hour per week. 101 and 102 must be taken in sequence.

201 Intermediate Latin: Prose and Poetry [3]
Prerequisite: Latin 102 or equivalent. Intensive review of elementary grammar; introduction to advanced grammatical constructions and patterns of usage; continued development of reading proficiency in various genres selected from classical and post-classical Latin literature; study of the origin and development of Latin literature. Three classroom hours and one laboratory hour per week.

Prerequisite: Latin 201 or equivalent. Study of advanced grammatical constructions and patterns of usage; reading selections from various Latin authors who flourished during the late Republic and early Empire of Rome; study of the cultural and political background of classical Latin authors. Three classroom hours and one laboratory hour per week.

321, 322 Latin Tutorial [1-3, 1-3]
Prerequisite: Latin 202 or equivalent, and permission of the department. Readings in Latin drawn from classical or post-classical literature. Selection of authors or genres by the instructor in consultation with the student. Meetings on a tutorial basis. A maximum of 6 hours may be earned over two semesters.

Classics Course
Classics 250 Classical Myths and Legends [3]
Prerequisite: None. All course work in English. A study of the myths and legends of Greece and Rome, with illustration of their role in classical and modern literature and art.

Portuguese Courses
151, 152 Elementary Portuguese [4, 4]
Intensive introduction to Portuguese, including basic grammar, aural training, the development of oral skills and reading proficiency. Introduction to the life and culture of Portuguese-speaking countries through selected readings, and programs in the language laboratory. Four classroom hours, two laboratory hours per week. 151 and 152 must be taken in sequence.

251 Intermediate Portuguese [4]
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; continued study of the life and culture of Portuguese-speaking countries. Four classroom hours, two laboratory hours per week.

Russian Courses
151, 152 Elementary Russian [4, 4]
Intensive introduction to Russian, including basic grammar, aural training, the development of oral skills and reading proficiency. Introduction to the life and culture of Russia through selected readings, and programs in the language laboratory. 151 and 152 must be taken in sequence.

251 Intermediate Russian [4]
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 oral skills; continued study of the life and culture of Russia. Four classroom hours, two laboratory hours per week.

252 Russian Conversation and Composition [3]
Prerequisite: Russian 251 or permission of instructor. Development of the student's ability to express himself orally on topics of current interest and everyday situations; composition will provide practice in more difficult forms of expression.

253 Readings in Russian Literature [3]
Prerequisite: Russian 251 or permission of instructor. Readings of Russian literary works in the original language with all lectures, discussions and examinations in English.

275 Contemporary Soviet Life [3]
Prerequisite: None. All course work in English. The social life, art, economics, education, view of life and personal aspirations of the Soviet citizen today. Films and slides will supplement readings and lectures.

311 Contemporary Soviet Short Fiction [3]
Prerequisite: Russian 251 or equivalent, and permission of instructor. Reading and discussion of recent short stories by the best-known Soviet writers of today. Readings will be in the original language, with lectures and discussion partly in English, partly in Russian.

353 Russian Civilization [3]
Prerequisite: None. All course work in English. A survey of the civilization and culture of Russia and the Soviet Union. In addition to readings and lectures, the course will include films, slides and music.
Requirements for the Major in Spanish

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-seven hours of work in Spanish courses beyond the 258-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), History 271, 272 (Latin-American History), and History 443 (History of Spain and Portugal).

Spanish Courses

151, 152 Elementary Spanish [4, 4]
Intensive introduction to Spanish, including basic grammar, aural training, the development of oral skills and reading proficiency. Introduction to the life and culture of Spanish-speaking countries through selected readings, and programs in the language laboratory. Four classroom hours and two laboratory hours per week. 151 and 152 must be taken in sequence.

An intensive review of elementary Spanish designed for students who have had two years of secondary school Spanish but whose level of proficiency does not qualify them for Spanish 251. Introduction to the life and culture of Spanish-speaking countries through selected readings, and programs in the language laboratory. 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; continued study of the life and culture of Spanish-speaking countries. Four classroom hours, two laboratory hours per week.

Sample Schedule for Spanish Majors

First Semester
Spanish 151
English 101
Behavioral Science
Natural Science

Second Semester
Spanish 152
English 102
Behavioral Science
Natural Science

Third Semester
English Lit
Spanish 251
Social Science
Mathematics
Non-Western Culture (History 271)

Fourth Semester
English Lit
Spanish 252
Social Science
Spanish 254
History 272

Fifth Semester
Spanish 303
Spanish 305
Spanish (300- or 400-level)
Elective
Elective (second language suggested)

Sixth Semester
Spanish 304
Spanish 306
Non-Western Culture
Elective
Elective (second language suggested)

Seventh Semester
Spanish 307
Spanish (300- or 400-level)
General Linguistics (English 391)
Elective (second language suggested)
Elective

Eighth Semester
Spanish 308
Spanish Independent Studies
Elective
Elective

252 to 258. Application and expansion of language skills acquired in Spanish 151 through 251, in one or more of the following areas. These courses may be taken singly, 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 on 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.

258 Masterpieces of Spanish Literature [3]
Prerequisite: Spanish 251 or equivalent. Selected Spanish masterpieces which focus on those literary currents (e.g., themes, works, authors) which have enriched the body of world literature, Primarily for non-majors. Readings in Spanish with class discussion, tests and examinations in English.

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.

301 Advanced Grammar and Syntax [3]
Prerequisite: fifteen semester-hours of Spanish or permission of instructor. An in-depth review of Spanish grammar and syntax. The course provides extensive practice in controlled and free writing, with emphasis on the fundamental difficulties and points of interference which exist between English and Spanish.

303, 304 Advanced Conversation and Composition [3, 3]
Prerequisite: Spanish 252 or permission of instructor. These courses are structured to emphasize development of the skills required both to speak and to write Spanish correctly. They are required courses in the Spanish major program. They may be taken concurrently with Spanish 300, 305, 306, 307, 308 and 315, but must precede all other courses in the major program.

305, 306 Survey of Spanish Literature [3, 3]
Prerequisite: Fifteen semester-hours of Spanish or permission of 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: Fifteen semester-hours of Spanish or permission of 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 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 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 Gaidos; 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 instructor. An introductory study of Latin American civilization and culture, with supporting study of the history of the continent. The course is conducted in Spanish.

316 Social and Political Themes in the Latin American Novel [3]
Prerequisite: Junior standing or consent of the instructor. Study of major social and political themes in the modern Latin American novel, including the social condition of the Indian, agrarian problems, the Mexican revolution, dictators. All readings in translation; all course work in English. May not be used in fulfillment of requirements for the major in Spanish.

320 Linguistics of the Spanish Language [3]
Prerequisite: 303, 304, and 305, 306, or permission of 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 recommended for Spanish majors planning to teach Spanish or contemplating graduate work.

325 Major Hispanic Writers [3]
Designed for the non-major student, the course provides study of the works of major Hispanic writers (e.g., Garcia Lorca, Cela, Unamuno, Borges) in translation, with all course work in English. The writers to be studied will vary and will be announced in each semester's Schedule of Classes. May not be taken in fulfillment of requirements for the major in Spanish.

400 Stylistics [3]
Prerequisite: 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 translation written exercises. Recommended for senior majors in Spanish.

401 Latin American Poetry [3]
Prerequisite: Spanish 303, 304 and 307, 308 or permission of instructor. Study of the more representative lyric poets of Latin America from the colonial period to the present. Special attention will be given to the poetry of Marti, Dario, Lugones, Vallejo, Huidobro, Meru?u, Mistral, Mexico, and Spain.

403, 404 Contemporary Spanish Literature [3, 3]
Prerequisites: 303, 304 and 306, 305, or permission of instructor. The first semester examines in depth the main authors of the "generation of '98" including: Unamuno, Vallee-Inclan, Baroja, Azorin, Benavente, and Antonio Machado. The second semester includes an analysis of contemporary post-Civil War authors: Cela, Lefrere, Delibes, Bueno Valdes, Sastre, Sanchez Ferlosio, Garcia Lorca, Jimenez, Guillen, Alexandre, 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 303, 304 and 307, 308 or permission of 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, 305, 306 or permission of instructor. A study of the major works of Cervantes, with emphasis on Don Quixote.

412 Spanish Studies in Literature [3]
Prerequisite: Spanish 303, 304 or permission of instructor. Special studies in drama, essay, or other genres of Spanish or Latin American literature. The specific topic in a given semester may be obtained from the Department of Foreign Languages in advance.

415 Readings in Medieval Spanish Literature [3]
Prerequisite: Spanish 303, 304 and 305, 306 or permission of 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: senior standing as a major in Spanish and permission of the department chairman. Research and analysis of a selected problem in literature or linguistics in consultation with a member of the department. A maximum of six hours of independent study may be applied to fulfillment of requirements in the major.

497, 498 Senior Honors Tutorial [3, 3]
Prerequisite: senior standing as a major in Spanish, with an overall grade point average of 3.0 and 3.0 in the major field. Students who meet these criteria will be admitted to candidacy upon submission of a letter of application to the departmental Honors Committee in the second half of the junior year, supported by a faculty recommendation and an interview by and with the approval of the Honors Committee. In the first semester, weekly meetings with a faculty member to discuss readings from a comprehensive list prepared by the Spanish faculty. In the second semester, independent research and completion of an honors essay under the supervision of a member of the Spanish faculty.
## Sample Schedule for B.A. in History

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>History 101 (3 hours), Foreign Language (4 hours), English Composition (3 hours), Social or Behavioral Science (3 hours), Music or Art (3 hours)</td>
</tr>
<tr>
<td>Second Semester</td>
<td>History 102 (3 hours), Foreign Language (4 hours), English Composition (3 hours), Social or Behavioral Science (3 hours), Music or Art (3 hours)</td>
</tr>
<tr>
<td>Third Semester</td>
<td>History 121 (3 hours), Foreign Language (4 hours), Mathematics or Natural Science (4 hours), English Literature (3 hours)</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>History 122 (3 hours), English Literature (3 hours), Mathematics or Natural Science (4 hours), Philosophy or Religion (3 hours), Non-Western Culture (3 hours)</td>
</tr>
<tr>
<td>Fifth Semester</td>
<td>History 300 (3 hours), History elective (3 hours), Mathematics or Science (3 hours), Social or Behavioral Science (3 hours), Elective (3 hours)</td>
</tr>
<tr>
<td>Sixth Semester</td>
<td>History elective (3 hours), History elective (3 hours), Social or Behavioral Science (3 hours), Non-Western Culture (3 hours), Elective (3 hours)</td>
</tr>
<tr>
<td>Seventh Semester</td>
<td>Senior Seminar in History (or history elective) (3 hours), History elective (3 hours), Elective (3 hours), Elective (3 hours), Elective (3 hours)</td>
</tr>
<tr>
<td>Eighth Semester</td>
<td>Senior Seminar in History (or history elective) (3 hours), History elective (3 hours), Elective (3 hours), Elective (3 hours), Elective (3 hours)</td>
</tr>
</tbody>
</table>

*On leave of absence, academic year 1974-1975.*
History Courses

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. Expansion; Reconstruction and reaction; imperialism; industrialism.

201, 202 Survey of African Civilization [3, 3]
A survey of the history and cultural development of Africa and 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 effects on the rest of the world, as well as the contribution of the African heritage to the United States.

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.

The development of an independent Latin America since 1825. Emphasis is on the interactions between the United States and Latin America.

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.

300 Interpretations of History [3]
Required of majors in history. To be taken in the junior year. A study of the development of historical writings in the West from ancient to modern times, lectures and discussions of the works of outstanding historians with an introduction to historical methodology.

301 Classical Greece and Rome [3]
Prerequisite: Six hours of history, or permission of instructor. The political, social, economic, and cultural history of classical Greece and Rome from the development of the city-state through the fall of the Roman Republic.

304 History of Rome and Byzantium [3]
Prerequisite: Six hours of history, or permission of instructor. The political, social, economic, and cultural history of the Roman and Byzantine empires from the Emperor Augustus through the fall of Constantinople in 1453.

303 Western Europe in the Middle Ages [3]
Prerequisite: Six hours of history, or permission of instructor. A survey of the development of European society from the impact of the reforms of Diocletian and Constantine to the end of the fifteenth century. Emphasis will be placed on political, institutional, economic, and social developments, including the influence of the church.

305 The Renaissance [3]
Prerequisite: Six hours of history, or permission of instructor. A survey which considers the Renaissance as a phenomenon rather than as a chronological period. Emphasis is placed on the growth of humanism in Italy in the fourteenth and fifteenth centuries, the development of new political concepts, and the laicization of society. The transmission of these developments to transalpine Europe in the late fifteenth and sixteenth centuries is included.

306 The Reformation [3]
Prerequisite: Six hours of history, or permission of instructor. Late medieval ecclesiastical conditions and reform movements; late scholasticism; Protestant Reformation, Catholic Reformation, dynastic rivalries and religious wars. Concludes with the Peace of Westphalia (1648).

308 Nineteenth Century Europe [3]
Prerequisite: Six hours of history, or permission of instructor. 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 Irritidentism; Imperialism; the failure of diplomacy and the collapse of the European state system.

309 Contemporary Europe [3]
Prerequisite: Six hours of history, or permission of instructor. A survey of major political changes in Europe since 1914 with emphasis upon broad patterns of political conflict.

314 History of Germany [3]
Prerequisite: Six hours of history, or permission of instructor. History of the political, diplomatic, economic, social and cultural development of Germany from the dissolution of the Holy Roman Empire to the present, the course in two parts.

323 England Through the Revolution of 1688 [3]
Prerequisite: Six hours of history, or permission of instructor. 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; going against Parliament; Civil War and Interregnum; Restoration and Revolution.

324 England from the Revolution of 1688 [3]
Prerequisite: Six hours of history, or permission of instructor. 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, 1815-1914; the transition from Empire to Commonwealth; the role of Britain in the mid-twentieth century.

325 Tudor and Stuart England [3]
Prerequisite: Six hours of history, or permission of instructor. A history of England from the Battle of Bosworth Field to the accession of George I.

326 Rise of Russia [3]
Prerequisite: Six hours of history, or permission of instructor. An examination of political, social, and cultural experience of Russia from the appearance of the Kievian state to the age of Pushkin.

329 Modern Russia and the Soviet Union [3]
Prerequisite: Six hours of history, or permission of instructor. 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 Westward Movement in the United States [3]
Prerequisite: Six hours of history, or permission of instructor. The history of the exploration, settlement, and expansion of the frontier, with emphasis on its influence upon cultural and political institutions.

335 The Afro-American Experience in the United States [3]
Prerequisite: Six hours of history, or permission of instructor. A survey of the history of the Afro-American experience in the United States from 1619 to the present, tracing the story of Blacks in America under both slavery and freedom.

341, 342 United States Constitutional History [3, 3]
Prerequisite: Six hours of history, or permission of instructor. Development of American constitutional theory and practice from its colonial origins to the present. The second semester will begin at the Civil War.

343, 344 Diplomatic History of the United States [3, 3]
Prerequisite: Six hours of history, or permission of instructor. 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 deals with the twentieth century.

348 American Economic History [3]
Prerequisite: Six hours of history, or permission of instructor. 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.

351 History of the Old South [3]
Prerequisite: Six hours of history, or permission of instructor. 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 through the emergence of economic, political, social and intellectual institutions.

352 The South Since 1865 [3]
Prerequisite: Six hours of history, or permission of instructor. 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 retain the mainstream of American life.

History courses are continued on the next page.
363 The History of Argentina, Brazil, and Chile [3]
Prerequisite: History 271 (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 Diplomatic History of Latin America [3]
Prerequisite: History 272 (362) or permission of instructor. A careful treatment of political, social and cultural relations of 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.

401 Colonial America [3]
Prerequisite: Six hours of history, or permission of instructor. An intensive study of colonial American history from its European origins through the Revolutionary War.

403 Early National Period in American History, 1783-1820 [3]
Prerequisite: Six hours of history, or permission of instructor. A study of the formative years of the new republic from the Treaty of Paris of 1783 to the election of 1820. Among the major topics considered are the Confederation, the Constitutional Convention, the ratification struggle, the party battles of the Federalist era, Jeffersonianism, and the failure of efforts to maintain American neutrality and gain advantage for the United States during the Anglo-French wars of the late 18th and early 19th centuries. The course will conclude with an investigation of the Era of Good Feelings.

405 Civil War and Reconstruction [3]
Prerequisite: Six hours of history, or permission of instructor. An inquiry into the course, conduct and consequences of the American Civil War and its aftermath. Emphasis is placed on the interconnectedness of political, military and economic affairs.

411 Cultural and Intellectual History of the United States: 1600-1865 [3]
Prerequisite: Six hours of history, or permission of instructor. 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 liberal conservatism; revivalism and other religious developments; industrialism, liberal capitalism, and the idea of progress.

412 Cultural and Intellectual History of the United States Since 1865 [3]
Prerequisite: Six hours of history, or permission of instructor. American thought and society from 1865 to the present. The effects of industrialization upon 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 mass media.

421 Intellectual and Cultural History of Europe, 1715-1848 [3]
Prerequisite: Six hours of history, or permission of instructor. The Enlightenment in Europe and its debt to seventeenth-century thought. The reaction to the Enlightenment during and following the French Revolution, the Sturm und Drang literary movement in Germany, and Romanticism in England, France, and Germany. Parallel developments in political thought, science, philosophy, and the arts.

422 Intellectual and Cultural History of Europe, 1848 to the Present [3]
Prerequisite: Six hours of history, or permission of instructor. The artistic, literary, political reaction to the revolutions of 1848. The development of Scientific Socialism and the evolutionary theories in science. A discussion of irrationalist philosophies, sociology, psychology, and anthropology. Relativism, Fin-de-siecle Europe and the rise of Expressionism, Cubism, and non-objective painting. Twentieth-century Existentialism.

433 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 II. Post-war prosperity, the post-war depression, the New Deal, farm and labor problems; isolation and neutrality, World War II, the Cold War and containment, Korean War and the problems associated with the Vietnam conflict.

438 Spanish Borderlands [3]
Prerequisite: Six hours of history, or permission of instructor. 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, 1500-1948: expeditions of discovery, exploration, and settlement; political and cultural developments; foreign encroachment; incorporation of the area into the United States; and the origins of the present Mexican-American minority.

Prerequisite: Six hours of history, or permission of instructor. A survey of French history from 1610 (The assassination of Henry IV) through the establishment (Richelieu), perfection (Louis XIV), and decline (Louis XV) of monarchical absolutism, to the opening stages of the Revolution. Emphasis will be placed on the institutional, social, intellectual, and economic transitions which occurred during this period we know as "The old regime."

441 France Since the Revolution [3]
Prerequisite: Six hours of history, or permission of instructor. A study of domestic, foreign and cultural developments in France and their influence on Europe and the world from 1789 to the present.

443 History of Spain and Portugal [3]
Prerequisite: Six hours of history, or permission of instructor. Development of Spain and Portugal from prehistoric to modern times, noting particularly factors related to their former empires in America.

453 History of Mexico [3]
Prerequisite: Six hours of history or permission of instructor. An intensive study of Mexican history from the pre-Columbian era to the present, with emphasis upon the national period.

463 The Early History of the Indo-Pakistan Subcontinent [3]
Prerequisite: Six hours of history, or permission of instructor. The political history of the Indo-Pakistan sub-continent with special reference to Indus Valley people, Hindus, Jains, Buddhists and Muslims from ancient to medieval times.

464 Modern India and Pakistan [3]
Prerequisite: Six hours of history, or permission of instructor. The political history of the Indo-Pakistan subcontinent from mid-eighteenth century to the present. Background of the earlier cultures of the Hindus and the Muslims will be presented as prelude to developments in the modern period.

471 Modern China [3]
Prerequisite: History 241 or 242, or permission of instructor. China during the Ch'ing dynasty and the Republican era as the Confucian tradition broke down under the impact of Western penetration, giving rise to a struggle among various formulae (of which the Marxist-Leninist was ultimately successful) for China's salvation.

472 Modern Japan [3]
Prerequisite: History 241 or 242, or permission of instructor. Japan from the Meiji restoration in 1868 to the Second World War, with particular emphasis on Japan's uniquely successful modernization in the face of the challenge posed by the West following the opening of the country by Commodore Perry.

480 Alexander the Great and the Hellenistic World [3]
Prerequisite: Six hours of history, or permission of instructor. The empire of Alexander the Great of Macedonia, the spread of Hellenism in the Ancient Near East, and the Hellenistic monarchies through the Roman conquest.

481, 482 Senior Seminar in History [3, 3]
Open only to senior majors in history with consent of instructor. A student may not present more than three 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.

483 PhD: History of Ancient History [3, 3]
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.

Prerequisite: Senior standing. Six hours of history, or permission of instructor. A seminar on the varied manifestations of racism in the United States, as directed against Indians, Orientals, Jews, Mexican-Americans, and Afro-Americans.
Department of Mathematics

Professor Oppelt (Chairman)
Associate Professors Cabell, Dorey, Draper, Kiley, Papp, Sennott, Turner
Assistant Professors Bolstein, Chambers, Fischer, Gantz, Rice, Saperstone, Seidman, Shaw
Lecturers Arrillaga, Bode, Cragg, Ippolito, Kerrigan, Lanier, Mouchahoir, Weingarten

Requirements for the Major

B.A. Program. In addition to general degree requirements for a B.A. degree the following courses are required: Mathematics 115, 116, 215, 216, plus 18 more hours of which at least fifteen must be numbered above 300 for a total of 34 semester hours in mathematics.

Those students pursuing certification for secondary school teaching are advised to take Math 200, 221, 232, 266, 268 and 322. A sample schedule including certification requirements is available in the department.

B.S. Program. In addition to general degree requirements for the B.S. degree 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 for a total of 46 semester hours in Mathematics.

The science requirement may be fulfilled by one of the following four options: Physics 113, 114, 213, 214, 215, 216; Chemistry: four semesters excluding Chemistry 103 and 104, and 105; Biology: four semesters excluding Biology 103, 104, 124, 125, 185, 211, 225, and 140; Chemistry 111-112 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, 107, 108, 252, 254 and 261 do not count toward satisfying the requirements for 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, 106, 108, 261 and 268. 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, 268, 313, 314, 361, 362, 382, 443, 444, 446, 447. Students pursuing certification for elementary school teaching are advised to take Math 103, 104, 106, 113, 114, 200, 261, 268.

Mathematics Courses

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

101 Algebra and Elementary Functions
Meets 3 hours per week. No college credit is given. Basic algebraic manipulations. Linear equations and graphing. A study of the properties of polynomial, logarithmic, exponential, trigonometric functions.

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.

107, 108 Mathematics of Management [3, 3]
Linear inequalities and programming polynomial, exponential and log functions, graphing, probability, matrix algebra, elementary differential and integral calculus.

113, 114, 213, 214 Analytic Geometry and Calculus, I, II, III, IV [4, 4, 4, 3, 3]
Must be taken in sequence. Functions, limits, the derivative, maximum and minimum problems, the integral, transcendental functions, applications. Techniques of integration, vectors and analytic geometry, differentiation of functions of several variables. Linear algebra and applications, vector differential calculus, multiple integrals and infinite series. Differential equations.

Mathematics courses are continued on the next page.
### Sample Schedule for B.S. Mathematics Majors

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<th>Semester</th>
<th>Courses</th>
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<td>Sixth</td>
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<td>Math 322</td>
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<td>Math 400 level</td>
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<tr>
<td></td>
<td>Elective</td>
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<tr>
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<td>Elective (non-science)</td>
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<tr>
<td></td>
<td>Total:</td>
<td>15</td>
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</tbody>
</table>

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.

252 Introductory Statistics [2]
An introduction to the underlying principles and methods of elementary statistics. The course will emphasize an understanding of statistical techniques, how to apply them, and when to apply them.

254 Applications of Statistics in Health Care [1]
An introduction to the problems of data gathering and evaluation in the area of health care information. There will be some use of calculators as special projects will be assigned and existing reports in the area of health care will be evaluated and criticized.

261 Introduction to Computers [2]
Prerequisite: Three semester hours in mathematics. 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 Fortran language, basic programming and its application to various problems in mathematics and the physical sciences.

268 Computational Models and Problem Solving [3]
An introduction to a scientific programming language. An introduction to various computer applications involving numerical analysis, operation research and data processing. The formulation and interpretation of models drawn from the biological, Behavioral and 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.

316, 318 Advanced Calculus [3, 3]
Prerequisite: Mathematics 216. Elementary topology, metric spaces, limits, continuity, differentiation, integration, and series.

321 Abstract Algebra [3]
Prerequisite: Mathematics 215. Theory of groups, rings, fields.

322 Linear Algebra [3]
Prerequisite: Mathematics 215. Vector spaces, linear independence, bases, linear transformations, matrix algebra, inner product, special topics.

351 Probability [3]
Prerequisite: Mathematics 213 or 215. Random variables, probability functions, special distributions, limit theorems.

362 Statistics [3]
Prerequisite: Mathematics 361. 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 serving problems, Brownian motion.

391, 392 Reading and Problems [1-3, 1-3]
Enrollment restricted to mathematics majors. Independent study in mathematics. Must be arranged with instructor previous to registration.

411 Functions of a Complex Variable [3]
Prerequisite: Mathematics 316. Analytic functions, contour integration, residues, and applications to such topics as integral transforms, generalized functions and boundary value problems.

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

443, 444 Deterministic Models in Operations Research [3, 3]
Prerequisite: Mathematics 322 or permission of instructor. Linear programming, network models, and simulation, introduction to nonlinear and dynamic programming, game theory. Applications to economics, transportation and distribution problems, personnel or machine assignment and scheduling, blending problems, management of national resources.

446, 447 Numerical Analysis and Digital Computation [3, 3]
Prerequisite: Mathematics 216 and a knowledge of a scientific programming language. 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 Philosophy and Religion

Professors McFarlane (Chairman), Dykstra
Associate Professors Houlgate, Kreilkamp, McDermott, Swann
Assistant Professors Bergoffen, Fletcher (Acting Chairman, Spring 1975), Holman, Pielke, Srinivasan, Yance
Lecturers Badr, Mlecko, Pachence, Schick, Snyder

Requirements for the Major in Philosophy
The degree program in philosophy is designed to meet the needs of students with various interests and career goals. Major concentrations are available for students who wish (a) to pursue graduate studies in philosophy; (b) to emphasize philosophy in acquiring a broad liberal arts education; (c) to prepare for certain professions such as law, the ministry, government service; or (d) to complement other interests by taking a double major in philosophy and some related field of study. Students who plan to major in philosophy for any of these reasons should read carefully the following paragraph and, with the assistance of their advisers, plan a course of study that is most appropriate to their interests.

In addition to the general requirements for the Bachelor of Arts degree, philosophy majors must complete at least 30 semester hours in philosophy (exclusive of Phil. 100–Introduction to Philosophy) including: History of Western Philosophy (both semesters) and either Logic or Symbolic Logic. At least 18 semester hours which are credited toward the major must be courses at the 300 level or above, including six hours at the 400 level. For those students who plan to pursue graduate studies in philosophy, the following courses are recommended: Ethics or Social and Political Philosophy; Metaphysics; Philosophy of Mind or Theory of Knowledge; Twentieth Century Analytic Philosophy; Contemporary Continental Thought (Existentialism and Phenomenology).

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<tr>
<th>Sample Schedule for Philosophy Majors</th>
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<tr>
<td>First Semester</td>
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<td>Natural Science</td>
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<tr>
<td>English Composition</td>
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<tr>
<td>Foreign Language</td>
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<tr>
<td>Philosophy 173 or 211</td>
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<td>Second Semester</td>
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<tr>
<td>Natural Science</td>
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<td>English Composition</td>
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<tr>
<td>Foreign Language</td>
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<tr>
<td>Philosophy 251 or 373 or 374</td>
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<tr>
<td>Mathematics or Natural Science</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>Literature</td>
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<tr>
<td>Social &amp; Behavioral Sciences (Group A or B)</td>
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<td>Foreign Language</td>
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<td>Philosophy 231</td>
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<td>Fourth Semester</td>
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<tr>
<td>Literature</td>
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<td>Social &amp; Behavioral Sciences (Group A or B)</td>
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<td>Non-Western Culture</td>
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<td>Philosophy 232</td>
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<td>Eighth Semester</td>
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<tr>
<td>Philosophy 422 (424) or 425</td>
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http://catalog.gmu.edu
Philosophy Courses

100 Introduction to Philosophy [3]
An introduction to the nature of philosophical reasoning and to some of the main problems of philosophy. May not be counted towards the major in philosophy.

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.

211 Social and Political Philosophy [3]
An examination of the philosophical foundations of some of the major concepts and institutions in social and political thought such as society, the family, education, religion, economics, the state, human rights, freedom, morality, law, authority and civil disobedience. An effort will be made to show how these concepts and institutions reflect various assumptions concerning the nature of man, and how they relate to contemporary social and ideological movements.

212 Alternative Futures for Science and Society [3]
An inquiry into how the values of freedom and rationality are involved in the ways in which science and technology are being used to meet the urgent problems of our day. Readings are chiefly from contemporary thinkers. This course may not be taken by students who have already taken Philosophy 413.

231, 232 History of Western Philosophy [3, 3]
A survey of leading thinkers from early Greek philosophy to the nineteenth century. First semester: the Pre-Socratics, Plato, Aristotle, Augustine, Aquinas, and others; Second semester: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Hegel, and others.

251 Ethics [3]
A consideration of some of the perennial issues in ethical theory with a view toward comparing and contrasting the handling of these problems in classical, modern and contemporary thought. This course may not be taken by students who have already taken Philosophy 151.

254 Contemporary Ethical Problems [3]
Prerequisite: Philosophy 251. An examination of some contemporary ethical problems, e.g., Homosexuality, Abortion, Drugs, Civil Disobedience, Capital Punishment, the Rights of the Individuall vs. the Rights of Society, from the point of view of the dominant systems of ethics in use today, e.g., Utilitarianism, Deontology, Self-realization Ethics, Situationism.

273 Introduction to Symbolic Logic [3]
A study of predicate calculi by means of a step-by-step construction of artificial languages. Topics to be covered include procedures for constructing a calculus, proof techniques, significant properties of predicate calculi (e.g., completeness and consistency), and procedures for recognizing phrases (parsing algorithms).

311 Philosophy of Law [3]
Prerequisite: Three credits in philosophy. An investigation of the theories of natural law, legal positivism and legal realism as they pertain to some of the central metaphysical questions about law, e.g., What is the nature of law? What is a legal system? What is a valid law? What is a good reason for a judicial decision?

313 Philosophy of Religion [3]
Prerequisite: Three credits in philosophy. 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. This course may not be taken by students who have already taken Philosophy 213.

315 Philosophy of History [3]
Prerequisite: Three credits in philosophy. An investigation of the development of the historical consciousness of man. The purpose of this course will be 1) to distinguish the historical from the unhistorical attitudes of human consciousness; and 2) to investigate the various forms of historical consciousness by studying the Greek, Biblical and Secular interpretations of history. This course may not be taken by students who have already taken Philosophy 215.

331 Philosophy in the United States [3]
Prerequisite: Three credits in philosophy. Selected studies of American philosophers of the nineteenth and early twentieth centuries, such as Emerson, Thoreau, Peirce, James, Royce, Santayana, Dewey, and Whitehead. Emphasis is on their relation to American culture.

332 Twentieth Century Analytic Philosophy [3]
Prerequisite: Three credits in philosophy. Recommended Philosophy 173 or 232 or 273 or 372. An examination of twentieth-century analytic philosophy. Figures and movements covered will include Moore, Russell, Wittgenstein, logical positivism, and ordinary language philosophy.

333 Contemporary Continental Thought: Existentialism and Phenomenology [3]
Prerequisite: Three credits in philosophy. Philosophy 232 is recommended. A study of phenomenological and existential thought which clarifies phenomenology as the method of existentialism and which shows existential thought to be rebelling against, though rooted in, traditional philosophical thought.

334 Latin American Thought [3]
Prerequisite: Three credits in philosophy. 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 Korn 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.

351, 352, 353, 354 Ethics and Contemporary Political Thought, I, II, III, IV [3, 3, 3, 3]
Prerequisite: Three credits in philosophy. One course in ethics is recommended. 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.

355 Modern Ethics [3]
Prerequisite: Three credits in philosophy. Philosophy 251 is recommended. An investigation 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. This course may not be taken by students who have already taken Philosophy 252.

356 Philosophy of Art [3]
Prerequisite: Three credits in philosophy. A critical examination of the basic problems which arise from an inquiry into the meaning and value of art and our response to art. Some problems to be considered are: Can art be defined? What is the nature of an aesthetic experience? What is the role of art in society? Can one justify critical evaluations of works of art?

357 Philosophy of the Social Sciences [3]
Prerequisite: Three credits in philosophy. An inquiry into the philosophical aspects of the scope, methods, and uses of the behavioral and social sciences, with special emphasis on the issues of freedom and values.

371 Philosophy of Natural Science [3]
Prerequisite: Three credits in philosophy. One semester of logic recommended. A study of the aims and methodology of science. Among the questions of concern are what is a theory, what constitutes a good scientific explanation, how are new theoretical terms introduced into the language of science, what grounds are used for comparing rival theories, and is there a special method of scientific discovery.

372 Philosophical Methods [3]
Prerequisite: Three credits in philosophy. A consideration of the question, 'What is philosophy?' by examining various philosophical methods. The course will have a two-fold emphasis: (1) to study the internal relationship between a philosopher's method, doctrines and concept of philosophy, and (2) to examine the interrelationship between philosophers, i.e., to indicate how philosophers' criticisms of each other have affected the philosophical enterprise per se. Philosophers studied include Plato, Aristotle, Hume, Kant, Ayer, and Heidegger.

373 Theory of Knowledge [3]
Prerequisite: Three credits in philosophy. Discussion of basic problems concerning the nature of knowledge, with special study of the relation of knowledge to perception, to belief, and to language. This course may not be taken by students who have already taken Philosophy 171.

374 Philosophy of Mind [3]
Prerequisite: Three credits in philosophy. An investigation of such theories as dualism, behaviorism, materialism, and double-aspect as they pertain to some of the central philosophical questions about mind, e.g., What is mind? What is the relation of mind to body? What is the justification, if any, of our belief in the existence of minds other than our own?
375 Metaphysics [3]  
Prerequisite: Three credits in philosophy. 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. This course may not be taken by students who have already taken Philosophy 271.  
421, 422, 423, 424 Seminar [3, 3, 3, 3]  
The Seminar is ordinarily limited to philosophy majors who have completed nine semester hours of philosophy; but students from the other fields of concentration may be admitted if the topic is sufficiently close to their fields of study. Topics will vary from semester to semester.  
425, 426 Independent Study [3, 3]  
Prerequisite: Open only to philosophy majors with junior or senior standing and 15 hours of philosophy. Students wishing to undertake Independent Study must petition the department for permission. Individual study of some philosophical writer, problem, or movement. Student to produce at least one major piece of written work during the semester.

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  

132 Religion and Modern Man [3]  
An introduction to several views of the nature of religion, with particular emphasis given to the religious understanding of man and reality. Its relationship with the modern understanding of man and reality will be explored as expressed in contemporary anthropology, sociology, psychology, philosophy and literature.

211 Religions of the Near East [3]  
212 Religions of the Orient [3]  
213 Hindu Religion and Philosophy [3]  
A study of Hindu religious and philosophical developments from their origins through their formative periods. Emphasis is on tracing the evolution of the six major schools of philosophy, and the worship of Shiva, Vishnu and the Female Power.  
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 socio-political life, and consideration of the modern scene.  
237 Religion and the Literature 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.  
238 Black Religion [3]  
An examination of the interrelationship between black religion and culture. The history and interpretation of the black religious experience will be understood as it finds expression through literature and the arts, as well as through contemporary social and political movements. Students who have taken Religion 376 may not take this course.  
251 The Literature and Religion of the Bible I [3]  
A survey of the development of the Old Testament and intertestamental literature, with attention given to the literary, historical, and theological aspects.  
252 The Literature and Religion of the Bible II [3]  
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 Religious Ethics [3]  
Prerequisite: Sophomore standing or higher, or permission of instructor. A philosophical examination of some of the major theoretical and practical issues in contemporary Judeo-Christian morality. Among the issues to be studied are the following: the relationship between religious and nonreligious ethics, deontological and teleological ethical reasoning, situation ethics, and religious ethical judgments made in such areas as politics, economics, medicine, and sex. Students who have taken Philosophy 253 may not take this course.  
332 American Religion in Social Thought and Action [3]  
Prerequisite: Rel. 231 or permission of 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 permission of 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.  
336 Religion and Art of Asia [3]  
Prerequisite: Three credits in Religion or Art (recommended Religion 212, 213 or Art 101) or, permission of the instructor. A study of Hindu and Buddhist beliefs expressed in Asian art and architecture. Emphasis is on tracing the development of a set of religious themes from Indian art through South East Asian and Far Eastern art.  
372 Death of God Theology [3]  
Prerequisite: Junior standing and six hours of religion or philosophy, or permission of instructor. An intensive examination of the "Death of God" movement, conducted in a seminar format. The writings of major participants will be critically studied, including those of Gabriel Vahanian, William Hamilton, Thomas J.J. Altizer, Richard Rubenstein, and Paul van Buren. The reactions and replies to this movement will also be carefully considered.  
374 Process Theology [3]  
Prerequisite: Junior standing and six hours of religion or philosophy, or permission of instructor. An intensive examination of the philosophical background and the major exponents of Process Theology. The writings of Alfred N. Whitehead, Charles Hartshorne, John Cobb, Henry Wieman, Daniel D. Williams, Norman Pittenger, Schubert Ogden and Pierre Teilhard de Chardin will be included and studied in a seminar format.
Department of Physics

Professors  Johnston, Mielczarek

Associate Professors  Lankford, Papaconstantopoulos (Chairman)

Assistant Professors  Black, Flinn, Lieb, Welanetz

Lecturers  Davis, Klein, Lindgren, McKinley

Requirements for the Major

All entering freshmen in physics are required to take a proficiency examination in elementary algebra and trigonometry. The test will be given on the following designated dates, before the beginning of the summer, fall, and spring semesters: May 24, July 7, August 24, 1975, and January 12, 1976. Any student who fails the examination will be required to take Mathematics 101 or to retake and pass the examination prior to registration.

In addition to the general degree requirements, the B.S. in physics requires the completion of 44 semester-hours in the major and 23 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, 414, 302, 207 and 412, with at least five credit hours from the first three courses. Included in the 23 semester hours of mathematics the following courses are required: the two year calculus sequence, Physics 311 or Mathematics 313; Physics 312 or Mathematics 314; plus one course in mathematics at the 300 or 400 level.

The courses labeled Problems in Physics are intended for the outstanding student who can proceed beyond the standard requirements of the other courses in the physics program.

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 31 semester-hours in the major and 17 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.

The physics faculty will offer a comprehensive examination each spring which shall be optional for senior physics majors. An outstanding performance on this examination will entitle the student to the following statement on his or her transcript: “Senior Comprehensive Examination in Physics Passed with Distinction, (date)"

Sample Schedule for the B.S. Degree in Physics

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<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>First</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Chemistry 111 or Biology 113</td>
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<td></td>
<td>English 101</td>
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<tr>
<td>Second</td>
<td>Physics 114</td>
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<tr>
<td></td>
<td>Mathematics 114</td>
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</tr>
<tr>
<td></td>
<td>Chemistry 112 or Biology 114</td>
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</tr>
<tr>
<td></td>
<td>English 102</td>
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<td></td>
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<tr>
<td>Third</td>
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<td>Physics 216</td>
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<td>Mathematics 266</td>
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<td>Physics 311</td>
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<td>Mathematics Elective</td>
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<td>Physics 306</td>
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<td>Physics 302</td>
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<td>Physics 312</td>
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<tr>
<td></td>
<td>Physics 402</td>
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<td>Physics 405</td>
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<td>Physics 407</td>
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<td>Mathematics Elective</td>
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<td>Physics 414</td>
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<td>Physics 408</td>
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<td>Physics 412</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>
Physics Courses

The courses Physics 101-102 are recommended for biology and pre-medical students, and those mathematics and chemistry majors who are seeking a B.A. degree. The courses Physics 103, 104 are intended for non-science majors. Students may not receive credit for both the 101-102 and 103, 104 sequences.

101-102 Introductory College Physics [4, 4]
A sound background of high school algebra, geometry and trigonometry is essential. A two semester basic physics course with emphasis on those topics of classical and modern physics which are of particular importance to science majors. The principles of mechanics, heat, electricity and magnetism, optics, atomic and nuclear physics. Three hours lecture, three hours laboratory or supervised work.

103, 104 Principles and Development of Modern Physics [4, 4]
Prerequisite: Physics 103 is prerequisite to Physics 104. A course in physics for non-science majors. Topics include mechanics, relativity, cosmology, atomic physics, electricity and magnetism, nuclear physics and elementary particles. The course places some emphasis on the historical, philosophical and social aspects of modern physics. Three hours lecture, three hours laboratory or supervised work.

113 General Physics I [2]
Co-requisite: Mathematics 113, Mechanics, Two hours lecture, one hour recitation.

114 General Physics II [2]
Prerequisite: Physics 113 and Mathematics 113. Co-requisite: Mathematics 114, Mechanics, heat, properties of matter. Two hours lecture, one hour recitation.

201 Energy and Environment [3] [Offered second semester only]
No prerequisite. A study of the basic ideas of science and technology with emphasis on their interaction with our contemporary culture. The course is designed for the science and non-science major who has an interest in our current concerns of energy and environment, and will deal with the origin, forms, uses and distribution of energy and resulting environmental effects. Students who have taken Physics 201 under the old title will be excluded from this course. The course may not be included for credit by physics majors within the 44 hours of physics courses required for the B.S., or within the 31 hours of physics courses required for the B.A. degree. Three hours lecture.

203 Introduction to Electronic Instruments [2]
Prerequisite: Physics 101-102, A course designed for biology and chemistry majors to cover basic theory and operation of various electronic instruments and devices. One hour lecture, three hours laboratory. This course may not be applied toward a degree in physics.

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 or pure substances, equations of state, analysis of thermodynamics processes. Three hours lecture.

213 General Physics III [3]
Prerequisite: Physics 114 and Mathematics 114. Co-requisite: Physics 215 and Mathematics 213. Electricity and magnetism. Three hours lecture, one hour recitation.

215 General Physics III [Laboratory] [2]
Prerequisite: Physics 114 or Physics 102. Co-requisite: Physics 213 or permission of instructor. 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. Co-requisite: Physics 214 or permission of instructor. Experiments on optics and modern physics. Three laboratory hours.

225 Problems in Physics I [1]
Prerequisite: Sophomore status and 3.50 average in physics and mathematics. Individual study of physics problems of current interest. This course may be taken a maximum of three times.

302 Electronics [4] [Same as Engineering 302]
Prerequisite: Physics 213, 215 or permission of instructor. A lecture and laboratory course in electronics, design and operational characteris- tics 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 particle in one, two and three dimensions; systems of particles; non-inertial coordinate systems; equations of Lagrange and Hamilton. Three hours lecture.

306 Electromagnetic Theory [3]

308 Wave Motion and Electromagnetic Radiation [3]
Prerequisite: Physics 305, Vibrating string, plane waves, interference, diffraction, polarization, electromagnetic waves, dispersion, relativity. Three hours lecture.

311, 312 Methods in Theoretical Physics [3, 3]
Prerequisite: Physics 214 and Mathematics 214 or 216. Physics 311 or Mathematics 313 is prerequisite for Physics 312. A study of mathematical techniques as applied in classical and modern physics. Ordinary and partial differential equations, special functions, Fourier series, Laplace transforms, integral equations, matrices and tensors. Three hours lecture.

326 Problems in Physics II [1]
Prerequisite: Junior status and 3.25 average in physics and mathematics. Individual study of physics problems of current interest. This course may be taken a maximum of three times.

402, 403 Introduction to Quantum Mechanics and Atomic Physics [3, 3]
Prerequisite: Physics 303, or permission of 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 Senior Laboratory in Modern Physics [3]
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. Nine laboratory hours.

408 Senior Research [2 or 3]
Prerequisite: Senior Status, The student will work under the guidance of a staff member on a research project in experimental or theoretical physics. The hours of credit (2 or 3) will be agreed upon in advance by the student and staff member.

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 Computational Physics [3]
Prerequisite: Physics 311 or equivalent and Mathematics 266 or permission of instructor. Solutions to current problems in physics using digital computers. Three hours lecture.

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; reactions; nuclear models and reactions; elementary theory of nuclear forces; subnuclear particles. Three hours lecture.

Astronomy Course

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.
Department of Psychology

Professors Jordan, Mandes
Associate Professors Altman, Cooper, Mellinger (Chairman), Moretz, Pasnak, Tyer
Assistant Professors Allen, Buffardi, Chiseri, Flinn, Gessner, M. Gurkaynak, Litman, Mendelsohn, Peng, Sanford, Walters
 Acting Assistant Professor Madero
Lecturers Bruml, Cohen, Collins, Crowe, Granda, Grant, Gunzburg, I. Gurkaynak, McKeithen, Meister, Rapu, Wood

Requirements for the Major
While fulfilling the general degree requirements for a Bachelor of Arts degree, students majoring in psychology must accumulate 30 hours in psychology. These hours must include Psychology 100, 200, either 260 or 360 and one of the following: Psychology 304, 305, 309, 311, or 316. Hours earned in psychology may be applied to both the general degree requirement and the psychology major.

Areas in psychology may be located by the last two digits of each course number (experimental 00, developmental 10, clinical 20, industrial-social 30, and general, 60). It is recommended that students with a serious interest in psychology distribute courses over as many areas as possible in order to get a comprehensive picture of modern psychology. A student intending to major in psychology should take Psychology 200 as early as possible in the program since it is a prerequisite to several other courses. In addition, it is recommended that the student planning to pursue graduate study in psychology take either Psychology 205 or 206, and Psychology 320 and 360, and Mathematics 261.

Psychology Courses
100 Basic Concepts in Psychology [3]
Prerequisite to all other courses in psychology, An introduction to psychology as a scientific discipline including an examination of the concepts and methods in learning, motivation, development, personality and measurement, Students who have taken Psychology 101-102 cannot take this course.
200 Analysis and Interpretation of Psychological Data [4]
Prerequisite: Psychology 100 or permission of instructor, Descriptive and inferential statistics in design, analysis and interpretation of psychological research with practical application using calculators, Three classroom and two laboratory hours, Students who have taken Psychology 221 cannot take this course.
205 Sensory Psychology [3]
Prerequisite: Psychology 100 or permission of instructor, Biology desirable but not required, A review of the sensory systems in animals and man including sensory physiology, psychophysics and experimental psychology.

Sample Schedule for B.A. Psychology Majors

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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<tbody>
<tr>
<td>First Semester</td>
<td>English 101</td>
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<td>Foreign Language</td>
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<td></td>
<td>Natural Science</td>
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<td></td>
<td>Psychology 100</td>
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<td></td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>English 102</td>
</tr>
<tr>
<td></td>
<td>Foreign Language</td>
</tr>
<tr>
<td></td>
<td>Natural Science</td>
</tr>
<tr>
<td></td>
<td>Psychology 200</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Third Semester</td>
<td>English Literature</td>
</tr>
<tr>
<td></td>
<td>Foreign Language</td>
</tr>
<tr>
<td></td>
<td>Philosophy 100</td>
</tr>
<tr>
<td></td>
<td>Psychology (any 200 level course)</td>
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<tr>
<td></td>
<td>Elective</td>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>Psychology 260 or 360</td>
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<td>Electives</td>
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<td></td>
<td>12</td>
</tr>
<tr>
<td>Fifth Semester</td>
<td>English Literature</td>
</tr>
<tr>
<td></td>
<td>Philosophy 211 or 212</td>
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<tr>
<td></td>
<td>Psychology 304, 306, 308, 309, 311</td>
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<td></td>
<td>Electives</td>
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<td>16</td>
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<tr>
<td>Sixth Semester</td>
<td>Psychology (any 300 level courses for which student has prerequisites)</td>
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<td>Electives</td>
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<tr>
<td>Seventh Semester</td>
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<tr>
<td>Eighth Semester</td>
<td>Psychology</td>
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<td></td>
<td>Electives</td>
</tr>
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<td>3</td>
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206 Physiological Psychology [3]
Prerequisite: Psychology 100 or permission of instructor, Biology desirable but not required, A review of the role of the central nervous system in behavior including neuroanatomy, elementary biophysics, synaptic behavior and brain mechanisms in motivation, learning and memory, Students who have taken Psychology 307 cannot take this course.
207 General Experimental Psychology [3]
Prerequisite: Psychology 100 or permission of instructor, A survey of animal and human learning, perception and motivation,
210 Child Psychology [3]
Prerequisite: Psychology 100 or permission of instructor, A study of the process of human psychological development from conception to adolescence including such topics as genetic factors, emotional and intellectual growth and environmental influences, Students who have taken Psychology 203 cannot take this course,
215 Adolescent Psychology [3]
Prerequisite: Psychology 100 or permission of instructor, A study of the biological and cultural changes accompanying adolescence including the effect of these changes on emotional, intellectual, and social development, Students who have taken Psychology 204 cannot take this course.
220 Personality Theory [3]
Prerequisite: Psychology 100 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. Students who have taken Psychology 202 cannot take this course.

222 Behavior Modification [3]
Prerequisite: Psychology 100 or permission of instructor. A review of the application of various experimental principles to a wide variety of problemmatic human situations with the opportunity to apply this approach in a practicum setting.

230 Industrial Psychology [3]
Prerequisite: Psychology 100 or permission of instructor. An examination of the application of psychological principles and methods to problems commonly encountered in business and industry. Students who have taken Psychology 315 cannot take this course.

231 Social Psychology [3]
Prerequisite: Psychology 100 or permission of instructor. A study of man's development in a social matrix including such topics as socialization, cultural behavior, group norms and attitude formation. Students who have taken Psychology 201 cannot take this course.

260 History of Psychology [3]
Prerequisite: Psychology 100 or permission of instructor. A survey of man's attempts to understand himself systematically from the classical age to the present century including various models of man. Students who have taken Psychology 211 cannot take this course.

Prerequisite: Psychology 200 or permission of instructor. Experimental methodology within the context of the basic principles of animal learning including such topics as classical and instrumental conditioning and discrimination learning. Three classroom and two laboratory hours.

305 Human Learning and Memory [4]
Prerequisite: Psychology 200 or permission of instructor. Experimental methodology within the context of perceptual psychology including such topics as psychophysics, perceptual organization and constancies. Three classroom and two laboratory hours. Students who have taken Psychology 313 cannot take this course.

309 Perception [4]
Prerequisite: Psychology 200 or permission of instructor. Experimental methodology within the context of perceptual psychology including such topics as psychophysics, perceptual organization and constancies. Three classroom and two laboratory hours. Students who have taken Psychology 431 cannot take this course.

310 Developmental Psychology [3]
Prerequisite: Psychology 100 or permission of instructor. A review of the major developmental theories of man including perspectives of childhood, adolescence, adulthood and old age. This course will not apply as credit hours in the psychology major if students use Psychology 201, 215 or 314 for major credit.

311 Comparative Psychology [4]
Prerequisite: Psychology 200 or permission of instructor. Experimental methodology within the context of a study of behavior through the phylogenetic continuum including such topics as species-specific behavior, early experience and learning. Three classroom and two laboratory hours. Students who have taken Psychology 410 cannot take this course.

312 Psychology of Maturity [3]
Prerequisite: Psychology 220 or permission of instructor. An analysis of cognitive and behavioral components of maturity including such topics as positive mental health and its supportive environment.

314 Psychology of Gerontology [3]
Prerequisite: Psychology 100 or permission of instructor. An investigation of the impact of physiological and social factors on the psychology of aged persons.

316 Motivation [4]
Prerequisite: Psychology 200 or permission of instructor. Experimental methodology within the context of the concepts and principles which determine human and animal motivation including such topics as instincts and drives. Three classroom and two laboratory hours.

320 Psychological Tests and Measurements [4]
Prerequisite: Psychology 200 or permission of instructor. An examination and application of the principles underlying the theory, interpretation and administration of psychological tests including a study of tests of intelligence, achievement and ability. Three classroom and two laboratory hours. Students who have taken Psychology 401 cannot take this course.

321 Counseling Psychology [3]
Prerequisite: Psychology 325 or permission of instructor. A review of the theories and methods in psychological counseling.

323 Clinical and Social Psychology Research Techniques [4]
Prerequisite: Psychology 200 or permission of instructor. A review and application of some research techniques including interviewing, survey analysis and process analysis. Three classroom and two laboratory hours.

325 Abnormal Psychology [3]
Prerequisite: Psychology 220 or permission of instructor. A study of the development of abnormal behavior patterns including such topics as methods of diagnosis and prevention of serious mental disorders such as psychosomatic disorders, psychoses, character disorders and mental retardation. Students who have taken Psychology 301, 302 cannot take this course.

331 Ecological Psychology [3]
Prerequisite: Psychology 200 and one experimental course or permission of instructor. Theory and methods of ecological psychology encompassing man-environment relationships including the assessment of the coercive aspects of the total environment.

360 Theories and Systems of Psychology [3]
Prerequisite: Nine hours of psychology or permission of instructor. A review of various systems and theories that have played a role in contemporary psychology including association theory, structuralism, behaviorism and theories of personality. Students who have taken Psychology 413 cannot take this course.

361 Thinking [3]
Prerequisite: Psychology 100 or permission of instructor. A study of the major psychological theories of thinking and problem solving including a critical review of the experimental and empirical evidence relating to them. Students who have taken Psychology 306 cannot take this course.

411 Infant Development [3]
Prerequisite: Psychology 210 or permission of instructor. An examination of current issues, research methods and clinical evaluation techniques in the field of infant development. Students who have had Psychology 403 may not take this course.

412 Perceptual and Cognitive Development [3]
Prerequisite: Psychology 210 or permission of instructor. A review of the theories of perceptual and cognitive development including the works of Piaget, Gibson, Bruner, Sigel and Hunt. Students who have had Psychology 303 may not take this course.

414 Behavior Disorders of Childhood [3]
Prerequisite: Psychology 210 and 325 or permission of instructor. A review of the theories, methods, and research dealing with emotional and behavioral disorders of children.

420 Clinical Methods in Psychology [3]
Prerequisite: Psychology 325 or permission of instructor. The historical and empirical foundations of clinical psychology including a review of current clinical practice. Students who have had Psychology 416 cannot take this course.

421, 422 Practicum in Clinical Psychology [3, 3]
Prerequisites: Twelve hours of upper division courses in clinical psychology. Supervised experience in the application of psychological principles requiring work in a non-classroom situation.

423 Group Psychotherapy Techniques [3]
Prerequisite: Psychology 220 or permission of instructor. Review of theory and methods of group therapy with emphasis on humanistic and interpersonal approaches including applications to family therapy, alcoholism and drug abuse.

430 Human Factors Engineering [3]
Prerequisite: 230 or permission of instructor. An investigation of the complex man-machine interactions found in industry today. Extensive empirical research findings will be examined.

432 Seminar in Organizational Psychology [3]
Prerequisite: Psychology 230 or permission of instructor. A review of the theories and research relating to such topics as job satisfaction and motivation.

460 Independent Study in Psychology [1-3]
Prerequisite: A required experimental course and a research proposal approved in advance by the instructor and the department chairman. Open, to junior and senior majors only. An investigation of a psychological problem according to individual interest with stress on research methods. Students who have had Psychology 499 cannot take this course.

461, 462 Special Topics [3, 3]
Prerequisite: Permission of instructor. Selected topics reflecting interest in specialized areas to be announced in advance. Students who have had Psychology 480 cannot take this course.
Department of Public Affairs

Professor Early (Chairman)
Associate Professors Khoury, Mika
Assistant Professors Fonseca, Godbold, Knight, Nicholson
Acting Assistant Professor Hegedus
Instructor Andrews
Lecturers Gladstone, Jentsch, Mitchell, Thompson

Requirements for the Major in Geography
B.A. Program in Geography. To be eligible to graduate with a B.A. with a major in geography a student must complete at least 120 semester-hours of work and satisfy all requirements for the Bachelor of Arts degree prescribed by the University.

A candidate for the degree must present 33 semester hours of credit in geography to include Geography 102, 103, 305, 410, and 415 and one course in statistics approved by the department.

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, cause, 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

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.

215 Geography of the United States and Canada [3]
A study of the great diversity of physical and cultural landscapes in the United States and Canada, emphasizing the role of the environment in shaping patterns of demographic distribution and economic activity.

220 Geography of Europe [3]
A study of the role played by the natural environment and resource base in the changing political geography of Europe. Their influence upon such representative topics as recent trends toward supranationalism, changing patterns of population distribution, and urbanization will be emphasized.

230 Geography of the Soviet Union [3]
Analysis of the geographic factors involved in the history, economic development, and geopolitical situation of the Soviet Union. Ethnic diversity and population problems in a multi-national state will be stressed.

Sample Schedule for Geography Majors

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>English 101, Foreign language, Laboratory science, Geography course</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Semester</td>
<td>English 102, Foreign language, Laboratory science, Geography 102, Elective</td>
</tr>
<tr>
<td>Third Semester</td>
<td>English 203, 205 or 251, Foreign language, Geography 103, Art, music, philosophy or religion, Elective</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>English 204, 206 or 252, Social or behavioral science, Geography course</td>
</tr>
<tr>
<td>Fifth Semester</td>
<td>Non-Western course, Geography 305, Geography 301, Social or behavioral science, Elective</td>
</tr>
<tr>
<td>Sixth Semester</td>
<td>Non-Western course, Geography 410, Geography course, Elective, Social or behavioral science, Elective</td>
</tr>
<tr>
<td>Seventh Semester</td>
<td>Geography 415, Geography courses, Social or behavioral science, Elective</td>
</tr>
<tr>
<td>Eighth Semester</td>
<td>Science or mathematics course, Geography courses, Elective</td>
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<tr>
<td></td>
<td>301 Political Geography [3]</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Sophomore standing or higher, An analysis of the geographical factors involved in the political division of the earth’s surface. The course examines the structures and processes involved in the creation of political space at all levels—city, county, state, national and international and emphasized interrelations between geographical-political units and problems created by overlapping units.</td>
</tr>
</tbody>
</table>
302 Suburban Geography [3]
Prerequisite: Sophomore standing or higher. An analysis of the spatial aspects of man's social, economic and political activities within surburbania. Suburbanization is viewed both as an independent force and as a component of the larger urbanization process. Fairfax County will be utilized as a laboratory for suburban geographical study and student initiated fieldwork projects.

303 Conservation of Resources and Environment [3]
Prerequisite: Sophomore standing or higher. An analysis of spatial aspects of world resources and of problems resulting from their unequal distribution or unwise use. Population growth, its implications for resource use, and pollution problems will be stressed.

304 Geography of Population: Patterns and Problems [3]
Prerequisite: Sophomore standing or higher. Study of the spatial distribution of population, its causes and effects, and of the changing patterns resulting from population mobility. Emphasis on spatial characteristics of variables such as age, sex, race, education, and income. Population problems such as crowding and poverty are viewed in their spatial context.

305 Economic Geography [3]
Prerequisite: Sophomore standing or higher. An analysis of the pattern of distribution of world economic activity: the spatial economics behind this pattern and the influence of this distribution upon other spatial systems such as population, urbanization and the physical environment.

402 Problems in Urban Geography [3]
Prerequisite: Six hours of geography. An analysis of the structure and internal differentiation of cities. The course offers a variety of perspectives on the nature of cities and the opportunities they provide man in their intensive use of space. Urban problems and alternatives are analyzed in their spatial context.

403 Problems in Environmental Management [3]
Prerequisite: Six hours of geography, including Geography 102. Man's role as steward of the natural environment. Case studies of the impacts of human activities on atmospheric, hydrologic, geomorphic, and biotic processes.

405 Transportation Geography [3]
Prerequisite: Six hours of geography. An analysis of the structure, principles, location and development of world transportation. The course stresses the critical role of transportation in moving people, goods and ideas at the international, national, regional and urban levels.

410 Geographies [3]
Prerequisite: A course in statistics or permission of instructor. Exercises in the gathering, analysis, and graphic presentation of data in a spatial format.

415 Seminar in Geography [3]
Prerequisite: Open to junior or senior geography majors. Offers the student an opportunity to integrate his previous course work into a comprehensive disciplinary framework and to do in-depth study of some particular aspect of geography. The format will vary from semester to semester but will stress field work and readings in the current literature, history, and research techniques of the discipline.

420 Seminar for Teachers of Geography [3]
Prerequisite: Six hours of geography or permission of instructor. The course will focus on problems in teaching geography and on new teaching techniques, as well as current developments in research, methodology, and philosophy in the discipline. The course will be flexible, allowing for shifts in emphasis in different semesters.

Requirements for the Major in Government and Politics
B.A. Program in Government and Politics. To be eligible to graduate with a B.A. in government and politics a student must complete at least 120 semester-hours of work and satisfy all requirements for the Bachelor of Arts degree prescribed by the 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.

Sample Schedule for Government and Politics Majors

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>Laboratory science 4, English 101 3, Foreign language 4, Government 103 3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>Laboratory science 4, English 102 3, Foreign language 4, Government 132 3, Math 3</td>
</tr>
<tr>
<td>Third Semester</td>
<td>English 203, 205 or 251 3, Art, music, philosophy or religion 3, Social or behavioral science 3, Foreign language 4, Government 204 3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>Government 241 3, English 204, 206, or 252 3, Art, music, philosophy or religion 3, Social or behavioral science 3, Elective 3</td>
</tr>
<tr>
<td>Fifth Semester</td>
<td>Government electives 10, Electives 6</td>
</tr>
<tr>
<td>Sixth Semester</td>
<td>Government elective 5, Electives 9</td>
</tr>
<tr>
<td>Seventh Semester</td>
<td>Government elective 5, Electives 9</td>
</tr>
<tr>
<td>Eighth Semester</td>
<td>Government elective 5, Electives 9</td>
</tr>
</tbody>
</table>

*This specimen program is based on 12 hours of three semester-hours work earned in government at George Mason University or brought in on transfer. All required foreign language credit is shown as earned at George Mason.

However, a student who transfers to the University must earn at this campus at least 12 hours in his major subject by completing courses at the upper division level. Each transfer student, therefore, must successfully complete not fewer than three upper division courses in government and politics.

Students are urged to select government courses so as to diversify their choices and thereby gain introduction to as wide a range of their major subject as they can. Each faculty adviser will identify those non-government electives thought to be especially well related to the major concentration.

http://catalog.gmu.edu
B.S. with a Major in Public Administration. The program of study leading to the degree of B.S. with a major in public administration comprises a core of work in government and politics and quantitative and distributive requirements for appropriate courses in other subjects of the curriculum. To complete this course of study, a student must earn 125 semester-hours of credit and meet general degree requirements set for the B.S. degree by work falling within the following pattern:

**Composition and Literature**
- Hours: 12

**Core Requirements**
- Economics: 103, 104, and six hours to be elected from 150, 306, 310, 311, 330 and 350.
- Hours: 39

**Supporting Requirements**
- Statistics: 3-6
- Bus. Ad. 261 and 262, Soc. 221, or Math 252 and 255.
- Computers: 7
- Math 107, 261 and at Northern Virginia Community College DAPR 147 or Bus. Ad. 212 and DAPR 144 and 147.
- Communications: 9
- Psychology 100 and one course from Psych. 220, 230 and 231.
- Sociology 101 and 203 or 332.
- Hours: 31-28

**Open Electives**
- Total Hours: 125

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<table>
<thead>
<tr>
<th>Sample Schedule for Public Administration Majors</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>English 101</td>
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<tr>
<td>Government 103</td>
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<tr>
<td>Economics 103</td>
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<tr>
<td>Business Administration 201</td>
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<td>Sociology 101</td>
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<td>Second Semester</td>
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<tr>
<td>English 102</td>
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<tr>
<td>Government 204</td>
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<tr>
<td>Sociology course</td>
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<tr>
<td>Economics 104</td>
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<tr>
<td>Elective</td>
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<tr>
<td>Third Semester</td>
</tr>
<tr>
<td>English 203, 205 or 251</td>
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<tr>
<td>Economics course</td>
</tr>
<tr>
<td>Sociology 221</td>
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<tr>
<td>Psychology 100</td>
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<tr>
<td>Business Administration 232</td>
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<tr>
<td>Fourth Semester</td>
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<tr>
<td>English 204, 206 or 252</td>
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<tr>
<td>Elective</td>
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<tr>
<td>Psychology course</td>
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<tr>
<td>Speech 251</td>
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<tr>
<td>Government 241</td>
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<td></td>
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<tr>
<td>Fifth Semester</td>
</tr>
<tr>
<td>Business Administration 212</td>
</tr>
<tr>
<td>Government 325</td>
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<tr>
<td>Government 341</td>
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<tr>
<td>Elective</td>
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<tr>
<td>Sixth Semester</td>
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<tr>
<td>Economics course</td>
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<tr>
<td>Government 415</td>
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<tr>
<td>Government elective</td>
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<tr>
<td>DAPR 144</td>
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<tr>
<td>Seventh Semester</td>
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<tr>
<td>DAPR 147</td>
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<tr>
<td>English 309</td>
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<tr>
<td>Government 440</td>
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<tr>
<td>Electives</td>
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<td></td>
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<tr>
<td>Eighth Semester</td>
</tr>
<tr>
<td>Government 445</td>
</tr>
<tr>
<td>Electives</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>
Government and Politics Courses

101 Concepts of Democratic Government [1]
See description for Government 103.

102 British-American Democratic Government [2]
See description for Government 103.

103 Introduction to Democratic Government [3]
An analysis and comparison of the American presidential and the British parliamentary forms of democratic government examined in light of basic concepts and institutions of democracy. Subdivided into:
- Govt. 101: Concepts of Democratic Government [1] dealing with introductory concepts basic to democracy, and Govt. 102: British-American Democratic Government [2] presenting the comparative and analytical phases of the American and British systems. Each may be taken separately. To register for both, enroll in Govt. 103. However, Government 102 and Government 103 are not open to students who have completed a course in American national government.

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.

301 Public Law and The Judicial Process [5]
Prerequisite: Junior or senior standing. An introduction to general jurisprudence, and comparative 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.

325 Introduction to Public Planning [5]
Prerequisite: Junior or senior standing. A course designed to identify the framework, subject matter, uses, methods, administration, and future of public planning. Some attention will be given to program implementation. Emphasis will be placed upon the local government level.

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 and 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 management systems, roles of the bureaucracy, and relationships between the individual and the organization.

350 Advanced International Relations [5]
Prerequisite: Government 132 and junior or senior standing. Advanced inquiry into international relations; organization; law; pacific settlement of disputes; crisis and conflict resolution.

415 Government and Politics of Metropolitan Areas [5]
Prerequisite: Junior or senior standing. An examination of the government, politics, and problems of metropolitan centers and surrounding areas.

426 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.

440 Introduction to Administrative Law and Procedures [5]
Prerequisite: Junior or senior standing. Introduction to the law of public office in general with some specific attention to Virginia.

445 Administrative Resources Management [5]
Prerequisite: Junior or senior standing. An examination of the concepts, methods and systems employed in the management of resources by governmental administration with primary focus upon that in the United States.

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.

460 Foreign Policies and Analysis [5]
Prerequisite: Government 132 and junior or senior standing or permission of instructor. A course intended to introduce students to foreign policy analysis and to the foreign policies of major world powers, of regional blocs, and of selected nations.

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 situation as determined by the department.

490 Seminar [5]
Prerequisite: A seminar open to senior majors, Department of Public Affairs, and by permission as course enrollment permits to other seniors who have completed not fewer than twelve hours of work in government. May not be repeated. The subject of the seminar will vary from semester to semester according to the specialization of the faculty member in charge. Readings, individual or group projects, and discussions of seminar papers will comprise the content and format.

499 Special Studies [9]
Open to authorized senior majors only. Course work arranged with faculty permission. Credit will be fixed to suit each situation as determined by the department.
Department of Sociology

Associate Professors MacConkey (Chairman), Hughes, Tavani
Assistant Professors Borkman, DuMez, Fries, Hardwick, Kelly, Millar, Morgan, Raskin, Rich, Williams
Instructor Ryburn
Lecturers Perry, Wakefield, Wyatt

Requirements for the B.A. in Sociology

Area Requirements. Students majoring in sociology must satisfy the area requirements set for the Bachelor of Arts degree at George Mason University.

Major Requirements. Thirty-three hours of work in sociology including Sociology 221, 303, and 411. Anthropology 232 may apply toward the 33 hour sociology requirement. A maximum of 42 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.

Electives. In addition to the above requirements for majors, students are advised to elect other relevant anthropology courses as well as courses in biology, philosophy, and psychology.

Sample Schedule for Sociology Majors

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>Sociology 101</td>
<td>3</td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4</td>
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<td></td>
<td>14</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>Sociology 152</td>
<td>3</td>
</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>Sociology 201 or 203</td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 106</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<td></td>
<td>16</td>
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<tr>
<td>Fourth Semester</td>
<td></td>
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<tr>
<td>Sociology 206 (or 225 or 280)</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 221</td>
<td>4</td>
</tr>
<tr>
<td>English Literature</td>
<td>3</td>
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<tr>
<td>Anthropology 114</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<td></td>
<td>16</td>
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<tr>
<td>Fifth Semester</td>
<td></td>
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<tr>
<td>Sociology 303</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Sociology Courses</td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 232</td>
<td>3</td>
</tr>
<tr>
<td>Non-Western</td>
<td>3</td>
</tr>
<tr>
<td>Art, Music, Philosophy or Religion</td>
<td>3</td>
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<tr>
<td></td>
<td>16</td>
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<tr>
<td>Sixth Semester</td>
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</tr>
<tr>
<td>Advanced Sociology Courses</td>
<td>6</td>
</tr>
<tr>
<td>Art, Music, Philosophy or Religion</td>
<td>3</td>
</tr>
<tr>
<td>Non-Western Course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<td></td>
<td>15</td>
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<tr>
<td>Seventh Semester</td>
<td></td>
</tr>
<tr>
<td>Advanced Sociology Course</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 411</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
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<td></td>
<td>15</td>
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<tr>
<td>Eighth Semester</td>
<td></td>
</tr>
<tr>
<td>Advanced Sociology Courses</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
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<td>15</td>
</tr>
</tbody>
</table>
Anthropology Courses

114 Introduction to Cultural 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, May not be used for sociology credit.

135 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 civilizations in the Old and New Worlds. May not be used for sociology credit.

232 Cultures in Comparative Perspective [3]
An intensive comparative analysis of selected cultures from several ethnographic regions. The concept of culture will be utilized as a tool for both description and explanation. May be used for sociology credit.

341 Issues in Anthropology [3]
Prerequisite: Introduction to Cultural Anthropology, its equivalent or permission of instructor. Issues in Anthropology offers the student an opportunity to explore topics of contemporary interest in the field of anthropology.

Sociology 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, including such topics as sexism, marriage, and the family.

201 Marriage and the Family [3]
Prerequisite: Sociology 101 or permission of instructor. A study of marriage and the family in contemporary America. Human sexuality, marital behavior, marital adjustment, socialization of children, family economics, divorce, and variations in family life.

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 reformatory institutions.

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 in small groups.

Prerequisite: Three hours of sociology. Institutional and personal dimensions of the socialization process analyzed in terms of norms, rules, group processes and stratification. Development of self-concept throughout the life cycle will be examined in terms of major agents of socialization: e.g., family, schools, peers, mass media. Focus is on influence of certain ascribed status prescriptions in contemporary society--such as race, age, sex, and the handicapped.

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.

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.

233 Power in Society: Introduction to Political Sociology [3]
An analysis of how political power is related to other aspects of social life, in terms of such sociological approaches as class conflict, social consensus, elite analysis, and bureaucratic organization theory. Discussion of local and national power structure research, corporate power, centralization, professionals and social change, protest and revolution, imperialism, the counter-culture, and the growth of multi-national corporations.

240 Social Services in Society [3]
Prerequisite: Sociology 101 or permission of instructor. A survey course covering the institutions of health and welfare in society. Places special emphasis on various ameliorative efforts made by organizations to combat the effects of social problems, and discusses the variety of skills and resources involved.

280 Sociology of Leisure [3]
Prerequisite: Three hours in sociology or permission of instructor. A sociological approach to leisure and other non-work with emphasis on the relation of the social meaning of leisure roles to other institutional roles of family, education, work, and community. Issues of resources, legislation, urbanization, and the environment will be explored.

299 Independent Study [1-3]
Prerequisite: Introductory Sociology 101 and a written proposal approved in advance of enrollment by the instructor. Individual study of a sociological topic of interest to the student.

302 Sociology of Delinquency [3]
Prerequisite: Sociology 202 or permission of instructor. An inquiry into the 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.

306 Demographic Analysis (Population Problems) [3]
Prerequisite: Sociology 101 or permission of instructor. (It is recommended that students first take Sociology 332). The influence of population structure, distribution, and change in vital rates on ecological, social, economic, and political problems of human society.

307 Sociology of Collective Behavior [3]
Prerequisite: Six hours in sociology to include Sociology 101 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.

308 Sociology of Race Relations and Minorities [3]
Prerequisite: Sociology 101 or permission of instructor. An examination of the history and changes in racial, ethnic, and minority relations in modern society, with particular emphasis on the Negro in American society.

332 Sociology of Urban Communities [3]
Prerequisite: Six hours of sociology to include 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.

373 The Community [3]
Prerequisite: Six hours of sociology including Sociology 101 or permission of instructor. An examination of small to moderately-sized communities ranging through the village, rural community, small town, and city sub-community. The latter category includes city localities, ethnic villages, and suburban communities. Includes study of case communities.

382 Education in Contemporary Society [3]
Prerequisite: Six hours of sociology to include Sociology 101 or permission of instructor. The study of education as a social institution. Its function as a socialization 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.

385 Sociology of Religion [3]
Prerequisite: Three hours of sociology or permission of instructor. A sociological analysis of religious phenomena. The personal and institutional dimensions of religious life will be studied within major sociological concepts such as role, status, norms, social aggregates and function. The student will study in depth an aspect of religion which interests him.
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.

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.

Sociocultural Change [3]
Prerequisite: Three hours of sociology or social anthropology or permission of instructor. The study of the sources, processes, and consequences of social and cultural alteration. Anthropological and sociological models are used for case analysis of social movements, culture contact and borrowing, innovation-adaptation, and planned change.

Social Stratification [3]
Prerequisite: Twelve hours in sociology including 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.

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.

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.

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.

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.

Seminar in Sociology [3]
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.

Independent Research in Sociology [1-3]
Prerequisites: Eighteen hours of sociology which include Sociology 303 and 411, a B average in sociology, 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.

Requirements for the B.S. in Social Welfare
To receive a B.S. degree with a major in social welfare, the student must successfully complete requirements for the Bachelor of Science degree, including: a. Thirty-one to 40 semester hours in social welfare, to include Social Welfare 201, 251, 252, 357, 358, 453, 454, 463, and 484; b. Sociology 101 and 152, Psychology 100 and 310, and either Sociology 203 or Psychology 231; c. Six semester hours in each of the following: English composition, English literature; philosophy/religion, and the social sciences (history/economics/government); d. Biology 103-104; e. Three semester hours in mathematics. Course work in speech and anthropology and further course work in sociology/psychology (especially Sociology 221/Psychology 200) are recommended.

To be admitted to the Social Welfare Program, a student must:
1. Have completed at least 45 credits with an average of 2.00 quality grade points.
2. Have achieved at least a "C" in each of the following: Social Welfare 201, 251, and 357.
3. Have submitted application for social welfare major between September 1 and November 15 to the Coordinator of Social Welfare Admissions. The student's application for admission to the social welfare major will be reviewed by social welfare faculty members for action. A personal interview may be required.

The Social Welfare Program is approved by the Council on Social Work Education as adequately preparing students for beginning professional practice in social work. The faculty has the responsibility to evaluate the student's performance periodically and the right to require a student to withdraw from the program when in its judgment his performance is not satisfactory. The decision will be based on the quality of academic and field performance as well as on personal fitness for the profession of social work. The student has the right to appeal.

Social Welfare Courses

201 Social Work Practice Laboratory [2]
Prerequisite or concomitantly: Social Welfare 251. An exploration of the dynamics of process in social work and of the student's suitability for a helping role. Emphasis is on experiential learning of the biological, psychological, social and cultural influences on the behavior of those who need and those who give help. Individual and group exercises and simulations are supplemented by service experiences in the field to provide live learning content. Students are helped to examine their own behavioral and learning patterns, values and attitudes, in order to increase their ability to understand and help social welfare clients. (Field service of 40-60 hours is required in this course.)

251, 252 Social Welfare Policy and Services I, II [3, 3]
Prerequisite or concomitantly: Social Welfare 201 and Sociology 152. The study of the historical development, central concepts, institutional nature, and the functions of social work as a profession. Exploration of underlying human needs, services organized to meet them, and their implications for social policy. Field investigations of analyses of human service delivery systems, and settings and roles of social work. (May not be taken for credit by students who have completed Social Welfare 362.)

323 Human Behavior in the Social Environment [3]
Prerequisites: Sociology 152, Psychology 310, Biology 104, Anthropology 114 or permission of instructor. A social systems approach, unifying and integrating concepts and knowledge from biology, anthropology, sociology, and psychology's view of behavior. Applications of this knowledge in professional practice will be examined in the social work literature and in the student's field experience.

357, 358 Methods of Social Work Intervention I, II [3, 4]
Prerequisite or concomitantly: Social Welfare 201. Studies the "holistic" nature of social work practice from a systems perspective. The common knowledge, values, foci, methods and techniques of social work are explored through readings, films, case records and role-plays. Particular emphasis is placed on identification of specific change objectives and on effective data-based methods and techniques for achieving them. Primary effort is directed toward developing knowledge and skills in the individual interview and work with groups, as basic instruments of individual, family and community change. Various theoretical orientations to practice are articulated, "models" explored, specialized techniques demonstrated, and particular social work roles delineated. Stress is placed on the worker's responsibility for effecting environmental as well as interpersonal change. (Field service of 40-60 hours is required in Social Welfare 358.)
Sample Schedule for Social Welfare Major

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>First Semester</td>
<td>Engl. Comp. 101</td>
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</tr>
<tr>
<td></td>
<td>Psych. 100</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Hist. or Econ. or Govt.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Phil. or Rel.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Soc. 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Soc. 152</td>
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<tr>
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<td>Soc. Welf. 261</td>
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</tr>
<tr>
<td></td>
<td>Biology 104</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Anthro. 114</td>
<td>3</td>
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<tr>
<td></td>
<td>Soc. Welf. 262</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td>Psych. 231 or Soc. 203</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Engl. Lit.</td>
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<tr>
<td></td>
<td>Biology 103</td>
<td>4</td>
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<td>Soc. Welf. 261</td>
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<tr>
<td>Third Semester</td>
<td>Psych. 231 or Soc. 203</td>
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<td>Engl. Lit.</td>
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<td></td>
<td>Biology 104</td>
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<tr>
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<td>Soc. Welf. 262</td>
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<td>Fourth Semester</td>
<td>Soc. Welf. 357</td>
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<td>Fifth Semester</td>
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<td>Sixth Semester</td>
<td>Speech 151</td>
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<td></td>
<td>Soc. Welf. 358</td>
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<td></td>
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<td>Elective</td>
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<tr>
<td>Seventh Semester</td>
<td>Soc. Welf. 453 Practicum</td>
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<td>Soc. Welf. 463 Seminar</td>
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<td>Elective</td>
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<tr>
<td>Eighth Semester</td>
<td>Soc. Welf. 454 Practicum</td>
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<td></td>
<td>Soc. Welf. 464 Seminar</td>
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<td>3</td>
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<td></td>
<td>Elective</td>
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</table>

Prerequisites: Social Welfare 252 and either Sociology 221 or permission of instructor. A study of the principles and methods of research appropriate to the functions and practice of social work. Emphasis is placed on the use of research in social work, steps in the research process, and various research designs and their utility to the social worker. Students study and apply principles of problem formulation, design, data-gathering, analysis, and presentation. Individual mini-projects and group research assignments are used to facilitate skill-development.

423 Social Work with Adolescents [3]
Prerequisites: Social Welfare 358 or permission of instructor. Examines the major needs of adolescents with their implications for social work practice. Explores how to deal with problems of family and peer group relationships, occupational choice, heterosexual and scholastic adjustment, and special problems of racial and cultural alienation, alcohol and drug abuse, and delinquency. Studies various theoretical orientations and evidence from research. Analyzes both individual and group approaches to counseling and treatment, and gives attention to the use of family and community resources to promote and sustain constructive growth and/or change.

425 Planning and Organizing for Community Change [3]
Prerequisite: Social Welfare 358 or permission of instructor. Studies the basic concepts, principles and processes of planning and organizing in social welfare. Explores the varieties in their application within diverse communities and models of local and broader community development, regional development, regional planning, social action and lobbying. Examines the use of different worker roles such as organizer, advocate, enabler, data-manager, proposal-writer, etc., situational criteria for choosing among them, and techniques for their effective implementation. Problems and issues of leadership in a democratic society are weighed in the light of both available research evidence and social work values. Priorities in local, state and national planning are investigated and assessed against evidence of need, deprivation, and inequity and ways of reordering them explored.

453 Senior Practicum I [5]
Prerequisites: Social Welfare 358 with a grade of at least "C", recommendation of faculty, and concomitant enrollment on Social Welfare 463. Open only to majors in Social Welfare. An intensive field experience course designed to offer an educationally relevant social work experience. Under supervisory instruction provided by field agencies, students are involved two full days per week in learning through participation in the provision of service to individual clients, families, groups and/or communities and in activities sponsored by or involving professional social workers. Discussion of field experiences in Social Welfare 463 and periodic faculty-agency consultations are employed to give further focus to learning.

454 Senior Practicum II [5]

463 Senior Seminar I [3]
Prerequisites: Social Welfare 358 and concomitant enrollment in Social Welfare 453. Designed to enable the student to deepen, expand and integrate his knowledge and skill for more effective social work intervention. Emphasis is placed on analysis of change strategies and roles, utilizing data drawn from concurrent student field experiences, literature, and dialogue with social agencies' personnel. Data are also gathered through limited but structured research into systems affecting individuals, families, and communities and assessed against the experiences of the students and other personnel, and the findings of published research. Implications for practice are a major learning goal of these studies.

464 Senior Seminar II [3]

489 Independent Study in Social Welfare [1-3]
Prerequisites: Social Welfare 453 and a research proposal approved by instructor in advance of enrollment. Investigation of a research problem in the field of social welfare.
College of Professional Studies

Programs. The College of Professional Studies enrolls students preparing for specific professions. The college is composed of five departments in which these baccalaureate professional programs are offered as major fields of study:

- Department of Business Administration
- Department of Education
  - Early Childhood Education
  - Elementary Education
- Department of General Studies
  - Medical Technology
  - Fire Administration
  - and Technology—in planning stage only.
- Department of Health and Physical Education
- Department of Nursing

Teacher Certification. The Department of Education is responsible for the professional sequence of courses, special standards and the certification recommendation for College of Arts and Sciences majors desiring to complete requirements for the Virginia Collegiate Professional Teaching Certification at the secondary school level.

Academic Policies. The University’s academic policies as outlined earlier in this catalog apply to students in the College of Professional Studies. However, education students (both elementary and secondary) should be aware of the 2.300 cumulative average required for admission to teacher education and to student teaching. Students seeking to transfer from other departments, schools, colleges, and universities, with cumulative averages lower than 2.300 are discouraged from doing so since they may have difficulty in meeting the minimum standard requirement for graduation. Further information on special requirements for preparing to teach appear under the Department of Education.

Degree Requirements. College of Professional Studies degree requirements are described in detail under the departmental sections.
Sample Schedule for Bachelor of Science with Major in Business Administration

Note: Course numbers are shown where applicable. Otherwise, students should consult the appropriate catalog section.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Econ 103 &amp; 104</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>Eng 101 &amp; 102</td>
<td>English Composition</td>
</tr>
<tr>
<td>Math 107 &amp; 108</td>
<td>Mathematics of Management</td>
</tr>
<tr>
<td>Lab Science</td>
<td>(Biology, Chemistry or Physics)</td>
</tr>
<tr>
<td>Either of the following:</td>
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<tr>
<td>Humanities (Art, Music, Religion or Philosophy), and/or Psychology or Sociology</td>
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<tr>
<td><strong>Total Freshman Year</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Bus Ad 201</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>Bus Ad 202</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>Bus Ad 261 &amp; 262</td>
<td>Statistics</td>
</tr>
<tr>
<td>Eng 203/204 or 205/206</td>
<td>English Literature</td>
</tr>
<tr>
<td>Bus Ad 232</td>
<td>Business Communication</td>
</tr>
<tr>
<td>Bus Ad 234</td>
<td>Principles of Management</td>
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<tr>
<td>Either of the following:</td>
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<tr>
<td>Psychology, Sociology or Humanities (Whichever not taken first year)</td>
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<tr>
<td><strong>Total Sophomore Year</strong></td>
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<table>
<thead>
<tr>
<th>Junior Year</th>
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<tbody>
<tr>
<td>Bus Ad 311</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>Bus Ad 341</td>
<td>Introduction to Business Finance</td>
</tr>
<tr>
<td>Econ 310 or 306</td>
<td>Money &amp; Banking or Price Theory</td>
</tr>
<tr>
<td>Speech (251 Recommended)</td>
<td>3</td>
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<tr>
<td>Bus Ad</td>
<td>Business Administration Electives</td>
</tr>
<tr>
<td>History or Government</td>
<td></td>
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<tr>
<td>General Electives</td>
<td>(Arts, Sciences, or Bus Ad)</td>
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<td><strong>Total Junior Year</strong></td>
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<tr>
<th>Senior Year</th>
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<tbody>
<tr>
<td>Bus Ad 421 &amp; 422</td>
<td>Business Law</td>
</tr>
<tr>
<td>Bus Ad 434</td>
<td>Business Strategy and Policy</td>
</tr>
<tr>
<td>Econ</td>
<td>Elective Economics Courses</td>
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<tr>
<td>Bus Ad</td>
<td>Business Administration Electives</td>
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<tr>
<td>General Electives</td>
<td>(Arts, Sciences or Bus Ad)</td>
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<td><strong>Total Senior Year</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
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I. Business Core Courses:  
   Accounting ........................................... 6  
   Statistics ........................................... 6  
   Principles of Management ......................... 3  
   Business Communication ............................ 3  
   Marketing .......................................... 3  
   Finance ............................................. 3  
   Business Law 1 .................................... 6  
   Strategy and Policy 2 .............................. 3  
   Business Electives 2 .............................. 12  
   **II. Language Arts and Culture** .................. 21  
   A. English Composition (6)  
   B. Speech (3)  
   C. Literature (6)  
   D. Humanities (6)  
   (Art, Music, Philosophy or Religion)  
   **Total Hours** ..................................... 45  

III. Social Sciences .................................... 21  
   A. Principles of Economics (6)  
   B. Economics (including 306 or 310) (6)  
   C. History or Government (3)  
   D. Psychology or Sociology (6)  

IV. General and Health Sciences ........................ 14  
   A. Mathematics (6)  
   B. Laboratory Sciences (8)  

V. Open Electives ..................................... 21  
   **Total Hours** ..................................... 122  

1Must be taken at George Mason University.  
2Of the 12 hours of business electives, six must be taken in a specialized field of the student's choosing. For a current listing of specialty fields and courses that may be used to fulfill them, a faculty adviser should be consulted.  
3Unless otherwise approved the student in business administration must complete Mathematics 107 and 108.
201 Financial Accounting [3]
A conceptual approach to the study of basic financial accounting and reporting practices, including financial control.

202 Managerial Accounting [3]
Prerequisite: Business Administration 201. Preparation of accounting reports and analyses for use by management in planning and controlling enterprise operations. Topics include statement analysis, resource flow statements, budgeting, cost concepts and applications, and the role of income taxes in decision-making.

212 Introduction to Management Information Systems [3]
A survey of the systems and hardware in general use for data processing by business organizations with emphasis on computer-based data processing and management systems. Topics covered include manual and punched card systems; computer systems—capabilities, hardware, operating principles, performance characteristics; computer software; analysis, design and implementation of computer programs, with emphasis on COBOL; laboratory exercises.

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 Fundamentals 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 Statistical Analysis I [3]
Prerequisite: Six credits of college mathematics (Math 107, 108 is recommended). Principal emphasis is placed on the use of statistical methods as scientific tools in the analysis of practical problems rather than on theory. Topics covered include: collection and presentation of data; descriptive statistics; elementary probability theory; properties and applications of important probability distributions—binomial, hypergeometric, multinomial, poisson, normal; sampling distributions; introduction to statistical inference-estimation.

262 Statistical Analysis II [3]
Prerequisite: Business Administration 261. A continuation of Business Administration 261. Topics covered include: methods of statistical inference-estimation and hypothesis testing; properties and applications of the t, chi square and f distributions; elementary decision theory; time series construction and analysis—index numbers, trend, seasonal and cyclic analysis; linear regression and correlation.

301 Cost Accounting [3]
Prerequisites: Business Administration 201, 202 or permission of instructor. Cost accounting provides data for three major purposes: (1) planning and controlling routine operations, (2) non-routine decisions, policy making and long-range planning, and (3) inventory valuation and income determination. Cost accounting is a comprehensive and detailed course in cost analysis, reporting, and control. It identifies many complicating factors and alternative treatments that occur in financial and managerial accounting.

302 Principles of Management Science I [3]
Prerequisite: Business Administration 261, 262 and junior class standing. Introduces both the viewpoint and methodology of the quantitative approach to decision-making problems. Emphasis is on the presentation and application of established techniques to practical business problems. Computer-based application packages are used as a primary tool of analysis. Topics covered include: mathematical model development; linear and dynamic programming; the distribution and assignment problem; game theory; statistical decision theory, with emphasis on the Bayesian approach.

303 Principles of Management Science II [3]
Prerequisite: Business Administration 302. Topics covered include: queuing theory and Markov processes; inventory models; statistical quality control; computer simulation techniques; PERT and GPM analysis; applications to practical business problems emphasizing design, research, model development and analysis in such areas as marketing and finance.

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 process; 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 salesmen, 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.

320 Distribution Systems [3]
Prerequisite: Business Administration 311. The study, using case analyses, of the design, selection, evaluation, and management of the marketing channels of distribution; with particular emphasis upon the physical distribution concept and the storage, handling and transportation functions.

325 Marketing Research [3]
Prerequisites: Business Administration 261 and 311. The concepts and uses of research to improve the effectiveness of marketing; particular emphasis upon the collection, analysis, and presentation of information important to marketing decisions.

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 103, 104 and Business Administration 201 and 202 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 Taxation [3]
Prerequisite: Business Administration 201 and 202 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.

345 Introduction to Governmental and Investment Real Estate [3]
Prerequisite: Economics 103, Business Administration 201, or permission of the instructor. A general overview of income producing real estate designed to introduce the student to the opportunities in this vast and rewarding area and at the same time lay the groundwork for more advanced courses. The student is exposed to the basic fundamentals of evaluation and analysis, depreciation methods, client profile, investments, income and expense statements, taxable income, exchanging and estate building.

346 Principles of Investments [3]
Prerequisite: Business Administration 201, 202 and Business Administration 341 or permission of 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 103 and 104 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.
Prerequisite: Business Administration 261 and 262. Several of the more advanced statistical methodologies of importance in business applications are treated, including: survey sampling, experimental design, multiple regression and correlation, forecasting. The techniques are applied to such business areas as marketing, personnel, accounting, auditing, and finance. Use of computer packages for analysis is emphasized.

357 Organizational Behavior and Administration [3]
Prerequisite: Business Administration 234 or permission of instructor. Perspectives for understanding and predicting behavior in formal organizations as applied to management theory and practice. Basic concepts of organizational behavior such as power and authority, roles, motivation, and group dynamics are explored in relationship to managerial functions such as the design of organizations and the promotion of organizational effectiveness and change.

369, 370 Intermediate Accounting [3, 3]
Prerequisite: Business Administration 201 and 202. Valuation, income measurement, and other theoretical problems in accounting for the financial transactions of an enterprise. Preparation and analysis of financial reports including statements of financial position, earnings statements, combined financial statements, statements of changes in financial position, and financial statements adjusted for price-level changes.

371 Advanced Accounting [3]
Prerequisite: Business Administration 201, 202, 369 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.

400 Corporate Accounting [4]
May not be taken for credit by business majors. A rigorous study of accounting concepts and techniques with emphasis on corporate financial accounting and analysis including an introduction to managerial concepts and techniques. Three lecture hours, three laboratory hours.

401 Auditing [3]
Prerequisite: Business Administration 369, 370 or permission of instructor. Audit objectives, reports and procedures are presented as part of the independent public accountant's review along with the newer tools of statistical sampling and EDP. Professional ethics and legal liabilities are examined as part of the framework within which the CPA works.

405 Institutional and Governmental Accounting [3]
Prerequisites: Business Administration 369, 370 or permission of the instructor. Advanced study of accounting for governmental, not for profit, and other institutions, including fund accounting and budgetary control.

409 Accounting Seminar [3]
Prerequisites: Senior standing and completion of Business Administration 369 and 370. Advanced study of selected topics in accounting, including accounting systems, advanced accounting theory and practice, and topics selected from current accounting literature.

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. Emphasis on case analysis.

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, partnership, bankruptcy, and other topics. This course utilizes the principles of marketing and finance as presented in Business Administration 311 and 341.

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 Advanced Financial Management [3]
Prerequisites: Economics 103, 104, Business Administration 201, 202, and 341 or permission of 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 firm. Extensive use of business cases.

434 Business Strategy and Policy [3]
Prerequisite: Final semester. A senior-level, capstone course designed to acquaint the student with the structure and management of various types of organization and the shaping of business policy. The principles of management and the managerial functions of planning, organizing, staffing, directing, and controlling are related, through case studies, to actual business subjects in the business curriculum, and will stress techniques of managerial decision-making, as they relate to business strategy formation; in large, medium, and small enterprises.

447 Futures Markets [3]
Prerequisite: Business Administration 341 and 346 or permission of instructor. An examination of the futures markets including the commodity exchanges, the International Monetary Market, and the stock option markets as they function to provide a pricing and marketing function for industry; as investment vehicles; and as a way of reducing economic risks through hedging. (Formerly BusAd 347.)

Prerequisite: Six credits of college mathematics (Math 107, 108 is recommended). Not for credit toward an undergraduate degree in business administration. The use of statistical methods as scientific tools in the analysis of practical problems in business and economics. Topics covered include: descriptive statistics; probability theory; probability distributions; sampling distribution; inference—estimation and hypothesis testing; elementary decision theory; time series analysis; linear regression and correlation; the analysis of variance. Three lecture hours, three laboratory hours.

499 Independent Study in Business Administration [1-3]
Prerequisites: Senior class standing, 24 hours of required business administration courses, including principles of marketing and introduction to business finance. A research proposal approved in advance by the instructor and the department chairman. Investigation of a business problem according to individual interest of the student, with emphasis on research methods.
Department of Education

Professors
Snyder (Chairman), Azarowicz, Joy, Montebello, Schindler

Associate Professors
Bindel, Carroll, Edgemon, Evans, Gilstrap, Martin, Schuchman, D. Smith

Assistant Professors
V. Austin, Bloecker, Bumgarner, Duck, Dzama, Given, Gray, Keller, Major, Perkes, Repp, Shelton, Snoddy, Wilson

Lecturers
Armstrong, B. Austin, Bouey-Yates, Bowen, Brown, Clayton, Crosby, Frey, Gaddy, Herold, Leedy, Rogers, Tankard

Requirements for Prospective Teachers
The teacher education programs are designed to develop teachers who are qualified academically and professionally, and who possess the personal attributes needed for success in the teaching profession. Teacher education programs serve undergraduates in the College of Arts and Sciences and the College of Professional Studies, and special undergraduate students who have earned a baccalaureate degree and who wish to complete a teacher preparation program.

The following teacher preparation programs are available:

Early Childhood Education - Nursery School through Grade 3
Elementary Education - Grades 4 through 7
Health and Physical Education - Grades NK through 12, or NK through 8, or 8 through 12
Secondary Education - Grades 7 through 12
Music Education - Grades 1 through 12, 7 through 12, or 1 through 7
Library Science - Certification only

Admission to Teacher Education Programs
Admission to teacher education programs 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 a 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 teacher education programs is granted by the Teacher Education Committee. To be considered for admission to a teacher education program, students must have completed Education 201, 202, 301 and 313 and have a grade point average of 2.300 in all courses transferred to or attempted at the University. Students holding baccalaureate degrees must have an average of 2.300 on all course work attempted in earning their degrees and in work at the University. All students must have an average of 2.300 in professional courses, and 2.300 in the major. A minimum grade of (C) is required in all professional courses. Music students must also be recommended by the music faculty.

In granting admission to teacher education programs, the Teacher Education Committee will give consideration to emotional balance, 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 18 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 at the University. All students must have an average of 2.300 in education courses, and 2.300 in the major. A minimum grade of (C) is required in professional courses. A minimal grade of (C) in Student Teaching is required to secure the recommendation of the University for certification. Applications for student teaching must be filed by May 31 for the fall semester and October 15 for the spring semester. During the professional semester, course work is limited to the 16 semester hours work in education. Because the professional semester requires a full time all day commitment and preparation work during evening hours, experience has shown that students with part time employment or a coursework overload usually experience difficulty.

Students holding baccalaureate degrees who are working toward certification will be required to meet the general education and 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.

1Not required of those preparing to teach with majors in the College of Arts and Sciences, except for Bachelor of Music candidates.
Teaching in the Secondary School
The following program for teaching in the secondary schools, usually grades seven through 12, may be completed as an undergraduate, as outlined in the sample program, or following graduation.

Students wishing to follow the second alternative should plan their undergraduate programs so that they:
1. Meet the general education requirements for certification as outlined below.
2. Complete the 200 and 300 level education courses as undergraduate electives.
3. Seek admission as special undergraduate students following award of the baccalaureate degree. These students can complete the remaining requirements for certification in one semester.

Teaching Music in the Elementary and Secondary Schools
See Department of Fine and Performing Arts section for program leading to the Bachelor of Music degree and the Virginia Collegiate Professional Certificate.

Teaching in Elementary Schools
Programs in early childhood education (nursery school, kindergarten, grades 1-3) and in elementary education (grades 4-7) are offered. These programs require completion of 128 semester hours.

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 401, or 402, whether he desires to be certified at the early childhood level or at the elementary level.

The following are the programs leading to the awarding of the Bachelor of Science Degree with a Major in Early Childhood Education or in Elementary Education and the Virginia Collegiate Professional Certificate with endorsement at the nursery school-kindergarten-grade 3 level, or the grade 4-7 level.

Bachelor’s Degree: College of Arts and Sciences
These programs are offered in the College of Arts and Sciences and include the general education requirements prescribed by that college. Majors are available in biology, chemistry, economics, English, French, German, government, history, mathematics, music, physics, psychology, sociology, and Spanish.

The following constitutes the program for the Virginia Collegiate Professional Certificate. Requirements vary from 131 to 139 hours. Completion of this program will usually require attendance at one or more Summer Sessions. The courses footnoted by the number three are not counted within the total semester hours required for degrees in the College of Arts and Sciences. In addition to meeting the general requirements for the baccalaureate degree, the student must also meet the general education requirements for Virginia certification and those of the George Mason University Teacher Education Program. An outline of these requirements follows:

<table>
<thead>
<tr>
<th>Social Sciences</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>History 121 or 122</td>
<td>(3)</td>
</tr>
<tr>
<td>Anthropology, Economics, Fine Arts, Geography, History, History, Political Science, Psychology or Sociology</td>
<td>(9)</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>27</td>
</tr>
<tr>
<td>Music Majors: Education 201, 202, 301, 313, and 436; Music 461 and 462, 3, or 4; or Music 462 and 463 or 4</td>
<td></td>
</tr>
<tr>
<td>All Other Majors: Education 201, 202, 301, 313; 416 or 450, 1, 2, 3, or 4; 421, and 435</td>
<td></td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>5</td>
</tr>
<tr>
<td>Health 210</td>
<td>(3)</td>
</tr>
<tr>
<td>Physical Education (from 100 series)</td>
<td>(2)</td>
</tr>
<tr>
<td>Virginia Teaching Field Endorsement Minimal Requirements</td>
<td>12-42</td>
</tr>
<tr>
<td>(See Certification Regulations for details. The following teaching field totals include any semester-hour credits also appearing in the general degree requirements. New certification regulations are now being formulated.)</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>[24]</td>
</tr>
<tr>
<td>Chemistry</td>
<td>[24]</td>
</tr>
<tr>
<td>Economics</td>
<td>[18]</td>
</tr>
<tr>
<td>English</td>
<td>[30]</td>
</tr>
<tr>
<td>English &amp; Dramatics</td>
<td>[36]</td>
</tr>
<tr>
<td>English &amp; Journalism</td>
<td>[36]</td>
</tr>
<tr>
<td>English &amp; Speech</td>
<td>[36]</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>[30]</td>
</tr>
<tr>
<td>General Science</td>
<td>[24]</td>
</tr>
<tr>
<td>Mathematics</td>
<td>[27]</td>
</tr>
<tr>
<td>Music</td>
<td>[36]</td>
</tr>
<tr>
<td>Physics</td>
<td>[20]</td>
</tr>
<tr>
<td>Psychology</td>
<td>[24]</td>
</tr>
<tr>
<td>Sociology</td>
<td>[18]</td>
</tr>
<tr>
<td>Speech</td>
<td>[12]</td>
</tr>
</tbody>
</table>

To secure a University recommendation for endorsement in any of the above fields students may be required to demonstrate proficiency in the area in which endorsement is sought and complete additional work if deemed necessary. Students will be referred to the appropriate academic department to determine proficiency and additional work required.

1Not required of Arts and Science majors, except for Bachelor of Music candidates, but Ed. 201 and 202 are strongly recommended.
2Required for Social Science endorsement.
3Physical Education and Education 435 do not count toward the total semester hours required for College of Arts and Sciences degrees, except for the Bachelor of Music.

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanitites</td>
</tr>
<tr>
<td>English 101, 102</td>
</tr>
<tr>
<td>English, Foreign Language, Speech, Fine Arts, Music, or Philosophy</td>
</tr>
</tbody>
</table>

http://catalog.gmu.edu
Sample Schedule for Bachelor of Arts Degree and Virginia Collegiate Professional Certificate

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Art 101</td>
<td>3</td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4</td>
</tr>
<tr>
<td>Physical Ed. (100 series)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Major Subject</td>
<td>3</td>
</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4</td>
</tr>
<tr>
<td>Physical Ed. (100 series)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Education 201</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Major Subject</td>
<td>3</td>
</tr>
<tr>
<td>Music or Philosophy</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Education 202</td>
<td>3</td>
</tr>
<tr>
<td>History 121</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>3</td>
</tr>
<tr>
<td>Major Subject</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Fifth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Anthropology, Psychology or Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Education 201</td>
<td>3</td>
</tr>
<tr>
<td>Education 444</td>
<td>1</td>
</tr>
<tr>
<td>Major Subject</td>
<td>3</td>
</tr>
<tr>
<td>Non-Western Culture</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Sixth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Anthropology, Psychology, or Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Education 313</td>
<td>3</td>
</tr>
<tr>
<td>Education 446</td>
<td>1</td>
</tr>
<tr>
<td>Major Subject</td>
<td>6</td>
</tr>
<tr>
<td>Non-Western Culture</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Professional Semester**

- Education 416, 450, 451, 452, 453, or 454: 3
- Education 421: 3
- Education 438: 9
- Education 446: 1
- **Total**: 16

**Seventh or Eighth Semester**

- Economics 103 or 104: 3
- Health 210: 3
- Major Subject: 9
- **Total**: 15

**Summer Sessions**

- Major Subject: 3-20
- Electives: 0-3
- **Total Hours**: 131

**Bachelor of Science in Education**

Major in Early Childhood or Elementary Education

**Required Hours**

I. Language Arts and Culture ...................... 32 or 33
   A. English .................................... 6
      1. English Composition (101-102) ........ 6
   B. Speech—Select one .......................... 3
      1. Principles of Effective Speaking (Sp 151)
      2. Public Speaking (Sp 152)
      3. Interpretive Reading (LAC 355)
   Option of C or D ................................ 8 or 9
   C. Foreign Language (8*)—Select one
      1. French, 0-8
      2. Spanish, 0-8
      3. German, 0-8
   D. Regional Cultures—Select three ............ 9
      1. Latin America (LAC 151)
      2. Sub-Sahara Africa (LAC 152)
      3. Asia and W. Pacific (LAC 153)
      4. North Africa and the Middle East
         (LAC 154)
   E. Literature .................................. 9
      1. Rdgs in Eng. and Amer. Lit.
         (205, 206) ................................ 6
      2. Children's Literature (LAC 305) ........ 3
   F. Humanities .................................. 6
      1. Art for the Elem. School (LAC 273) .... 3
      2. Music for Elem. School (LAC 182) .... 3

1, 2, 3 Refer to footnotes on page 89.
4 A total of 24 semester hours is shown for the major subject. To the extent that overlapping with general degree requirements apply, majors requiring more than 24 hours may be reduced. Majors requiring additional semester hours will increase the requirement of work during the summer sessions.
II. Social Sciences .................................. 18
   A. History ........................................ 12
      1. American (History 121, 122) .... 6
      2. World (History 101 or 102) .... 3
   B. Other subjects ................................ 6
      1. Anthropology ................................ 3
      2. Economics .................................. 3
      3. Geography .................................. 3
      4. Government ................................ 3
      5. History .................................... 3
      6. Sociology ................................... 3

III. General and Health Sciences ................. 21
   A. Personal and Community Health (Health 210) .... 3
   B. Physical Education Activities (100 series) .... 4
   C. Mathematics (GHS 371, 372) ................. 6
   D. Laboratory Science ............................. 8

IV. Professional (Major) Sequence ............... 36
    Early Childhood Education: 201, 202, 301, 313, 401, 403, 407, 419, 431, and Health 301 .... 36
    or Elementary Education: 201, 202, 301, 313, 402, 404, 408, 420, 432, and Health 301 .... 36

V. Open Electives*6 ................................. 20 or 23

Total Minimum Semester Hours ................. 128

*Only 15 required in social sciences for those taking the regional cultures sequence.

Open Electives: Early childhood or elementary education majors should plan the utilization of the available electives in such a way that their competence will be strengthened. This can be done by planning a program in a subject area such as foreign language, English, social sciences, music, art, science, library science, or by electing courses in instructional media and graduate courses open to qualified undergraduates.

Sample Schedule for Early Childhood or Elementary Education Major

<table>
<thead>
<tr>
<th>Freshman Year – 1st Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 103</td>
<td>4</td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Geography 101 or 102</td>
<td>3</td>
</tr>
<tr>
<td>History 101</td>
<td>3</td>
</tr>
<tr>
<td>Physical Ed. (100 series)</td>
<td>0-1</td>
</tr>
<tr>
<td>Regional Culture or For. Lang.</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Freshman Year – 2nd Semester</td>
<td></td>
</tr>
<tr>
<td>Biology 104</td>
<td>4</td>
</tr>
<tr>
<td>Economics 103 or 104</td>
<td>3</td>
</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>History 121</td>
<td>3</td>
</tr>
<tr>
<td>Physical Ed. (100 series)</td>
<td>0-1</td>
</tr>
<tr>
<td>Regional Culture or For. Lang.</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
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Sophomore Year – 1st Semester

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Sophomore Year – 2nd Semester

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Junior Year – 1st Semester

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<td>Health 210</td>
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<td>LAC 305</td>
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Junior Year – 2nd Semester

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Senior Year – 1st or 2nd Semester

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<td>Regional Culture</td>
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Professional Semester

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<td>Education 419 or 420</td>
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<td>Education 431 or 432</td>
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<td>Education 447</td>
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Total Hours 128
**Education Courses**

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. Students may not receive credit for more than one of the comparable courses relating to early childhood and intermediate grades. For example, students taking Education 401 may not receive credit for Education 402.

With the permission of his adviser, the chairman of the department, the course instructor, and the Dean of the Graduate School, an undergraduate student may be permitted to enroll in six semester hours of graduate course work for grade and if successful, apply the credit gained toward an undergraduate degree. This work will be in addition to undergraduate requirements in education courses. The student should consult with the chairman of the department for identification of graduate course work which can be taken for undergraduate credit.

**201, 202. Human Growth and Development [3, 3]**

Prerequisite: 201 for 202. 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 required.

**301 Foundations of Education [3]**

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 required.

**313 Educational Psychology [3]**

Prerequisite: Education 201, 202. Designed to acquaint the prospective teacher with the principles of psychology and their application to teaching. 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 required.

**325 Production and Utilization of Instructional Materials [3]**

A study of media production and utilization. A lab-centered course emphasizing individual projects.

**400 In Service Educational Development [2, 3, 4, 6]**

Prerequisite: Employment in a professional capacity by sponsoring school division, or educational agency, acceptability to the university, or permission of department. Offered upon request of a school division, or other educational agency, or upon establishment of a need on the part of a group of education personnel.

Provides an opportunity for instruction in various educational areas, such as teaching theory, curriculum, evaluation, materials, methods, reading, or other areas. The course may take any form appropriate for the area involved to include practicums and workshops. May be repeated. If applicable to a specific degree program may be accepted toward a degree by the university, May not be taken for graduate credit.

**401 Teaching Methods at Early Childhood Levels [3]**

Prerequisite: Education 301 and 313. The organization and conduct of learning experiences provided children in nursery school, 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 sciences. Field experiences in public schools are required.

**402 Teaching Methods in the Intermediate Grades [3]**

Prerequisite: Education 301 and 313. 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 and understanding of the approaches used in teaching, and unit and lesson planning. Major emphasis is placed on the teaching of art and the social sciences. Field experiences in public schools are required.

**403 Developmental Reading for Early Childhood Levels [3]**

Prerequisite: Education 401, Corequisite LAC 305. Reading readiness abilities, readiness for reading at the primary level, word analysis and word recognition skills, vocabulary development, reading comprehension and critical reading, interpretive oral reading, reading skills in content fields, study skills, and adaptive rates of reading. Emphasis is placed on reading at the nursery school, kindergarten, and grades 1, 2, and 3 levels. Field experiences in public schools are required.

**404 Developmental Reading in the Intermediate Grades [3]**

Prerequisite: Education 402, Corequisite LAC 305. Reading readiness abilities, readiness for reading at the primary level, word analysis and word recognition skills, vocabulary development, reading comprehension and critical reading, interpretive oral reading, reading skills in content fields, study skills, and adaptive rates of reading. Emphasis is placed on reading at the intermediate grade level, grades 4 through 7. Field experiences in public schools are required.

**407 Diagnostic Reading and Language Arts for Early Childhood Levels [3]**

Prerequisite: Education 403 and LAC 305. A study of the theory, methods, practices and materials involved in the teaching of communication skills with emphasis on the diagnostic teaching of reading to include techniques for evaluation of reading progress, difficulties experienced by children in learning to read, diagnostic techniques available to the classroom teachers, differentiation of instruction to fit individual capabilities, and corrective methods. Emphasis is placed on reading at the nursery school, kindergarten, and grade 1, 2, and 3 levels. Field experiences in public schools are required.

**408 Diagnostic Reading and Language Arts in the Intermediate Grades [3]**

Prerequisite: Education 404 and LAC 305. A study of the theory, methods, practices and materials involved in the teaching of communication skills with emphasis on the diagnostic teaching of reading to include techniques for evaluation of reading progress, difficulties experienced by children in learning to read, diagnostic techniques available to the classroom teacher, differentiation of instruction to fit individual capabilities, and corrective methods. Emphasis is placed on reading at the intermediate grade level, grades 4 through 7. Field experiences in public schools are required.

**416 Teaching Methods in the Secondary Schools [3]**

Prerequisite: Education 313, Corequisite: Education 421. 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 required.

**419 Teaching of Science at Early Childhood Levels [3]**

Prerequisite: Education 403, Corequisite: Education 407. 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 required.

* Taught as a block of 16 semester-hours during the professional semester. Course work beyond the 16 semester hours included in the professional semester is not permitted.
Library Science

Courses in library science are offered to enable students to qualify as school library media specialists in addition to their achieving certification at the elementary or secondary school level. The following are the courses required for certification as a school library media specialist: Library Science 401, 402, 403, 404, and 405; LAC 305, and Education 325.

401 Adolescent and Adult Literature [3]
The selection of classics and contemporary interdisciplinary reading materials in relation to the needs, abilities and interest of adolescents, including adult titles for young people. Reading guidance for this age group. Attention to the gifted student, reluctant reader, and slow reader. Procedure for handling complaints relating to controversial materials.

402 Information Services [3]
Use of basic library materials plus emphasis on elementary and secondary school library media. Provides experience in the evaluation of reference books and in answering fact-finding and material gathering questions.

403 Introduction to Technical Processing for Libraries [3]
The purpose of this course is to acquaint the library science student with general techniques and routines in the acquisition, preparation, and circulation of print and non-print materials. Includes simplified classification and cataloging.

404 Administration of School Library Media Centers [3]
Prerequisites: Library Science 401, 402, and 403. To develop the understanding, attitudes, skills and information necessary for leadership in a school library media center that will contribute to the school's educational objectives. Includes visits to neighboring school library media centers.

405 Practicum in the School Library Media Center [3]
Prerequisites: Library Science 404 at the university and admission to the teacher education program or possession of a Collegiate Professional Certificate or equivalent and permission of the instructor. Involves 120 hours of observation and practice in the school library media center. Designed to give the school media specialist experience in many aspects of media service.

*420 Teaching of Science in the Intermediate Grades [3]
Prerequisite: Education 404, Corequisite: Education 408. 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 required.

*421 Instructional Media [3]
Prerequisite: Education 313, Corequisite: Education 416, 450, 451, 452, 453, 454, or 455. 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 required.

*431 Student Teaching at Early Childhood Levels [9]
Prerequisites: Senior standing, an overall grade point average of 2.300, and 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 as required or needed. Attendance at periodic seminars is required.

*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, 450, 451, 452, 453, or 454, and 421. Not counted within the 120 hours required for College of Arts and Sciences degrees (except for the B.M.I.); for students entering September, 1971 and after.

*436 Student Teaching in Elementary and Secondary Schools [9]
Same as 431 except course prerequisites which are senior standing, an overall grade point average of 2.300, and appropriate materials and methods courses in the field.

440, 441, 442 Independent Study in Education [1-3]
Prerequisite: Admission to teacher education program and/or permission of department chairman. Students repeating the course will register for Education 441. 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 sciences; arts and crafts; health; secondary science; language arts; child growth and development; culturally deprived; social foundations; music; learning disabilities; guidance; and the mentally retarded.

444, 445, 446, 447 Directed Field Experiences [1, 1, 1, 1]
Prerequisite: Permission of Director of Field Experiences. Students repeating the course will register for the next higher number. Provides an administrative means for students taking professional education courses to be given credit for field experience activities conducted in conjunction with education courses. Courses with field experience activities include Education 201, 202, 301, 313, 401, 402, 403, 404, 407, 408, 416, 420, 450, 451, 452, 453, and 454, and Music 461, 462, 463, and 464. Registration must be concurrent with or subsequent to registration for courses requiring field experiences. One semester hour of credit is given for each 30 hours of field experiences successfully completed. Credit is with grade.

*450 Teaching Methods in the Secondary School—Foreign Languages [3]
Prerequisite: Admission to Teacher Education Program, Corequisite: Education 421. Offered Spring semester. Required to students seeking certification in Virginia or other jurisdictions. A study of the theories, practices, and methods involved in teaching in the content area. 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 required.

Same as 450, except offered Fall semester.

Same as 450, Offered Spring semester.

*453 Teaching Methods in the Secondary School—Natural Sciences [3]
Same as 450, Offered Spring semester.

*454 Teaching Methods in the Secondary School—Social Sciences [3]
Same as 450, except offered Fall semester.

*Taught as a block of 16 semester-hours during the professional semester. Course work beyond the 16 semester hours included in the professional semester is not permitted.
Department of General Studies

Associate Professors J. Smith (Chairman), Hill
Assistant Professors Gair, Hoyer, Ku
Instructor Longwell
Lecturer Johnson

Objective
The purpose of the department is to offer and coordinate courses and programs, principally for the College of Professional Studies. The primary focus is to develop and teach courses that are adapted for interdisciplinary and/or professional concerns in those areas where this approach is deemed most suitable. The department also acts as an agency for the coordination of service course offerings by the other colleges for the College of Professional Studies.

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 sciences, and general and health sciences.

Medical Technology. The department administers a program of study leading to the degree of Bachelor of Science with major in medical technology.

Fire Administration and Technology. This program will begin in the Fall of 1975 if approval by the State Council of Higher Education is granted. The proposed curriculum has been developed and it will be possible for students early in their college programs to make adaptations for transfer into this new professional program. Guidelines may be obtained from the department.

Requirements for the Major in Medical Technology
Graduation from the Medical Technology Program usually occurs at the end of the Summer Session. At the time the Medical Technology student makes application for a degree (see Calendar), the student must initiate the process of certification of the GHS 401 credits by paying the University’s Special Registration Fee. Certification of the completion of

Sample Schedule in Medical Technology

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<td>Biol 113 Biological Science</td>
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<td>Math 113 Analytic Geometry &amp; Calculus</td>
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<td>Eng 101 Composition and Literature</td>
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<td>Biol 114 Biological Science</td>
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1Six hours of psychology or six hours of sociology.
2Economics, geography, government, history.
3American Society of Clinical Pathologists recommends physics.
these credits must be received by the Office of the Registrar no later than two weeks prior to the intended graduation date.

I. Language Arts and Cultures ............... 15
   a. English
      1. English Composition (101-102) .......... 6
   b. Regional Cultures ............... 6
      1. Latin America (LAC 151)
      2. Sub-Saharan Africa (LAC 152)
      3. Asia and the Western Pacific (LAC 153)
      4. North Africa & the Middle East (LAC 154)
   c. Humanities ............... 3
      1. Art Appreciation (101)
      2. Music Appreciation (101)
      3. Philosophy
      4. Literature

II. Behavioral Science: Psychology or Sociology .... 6

III. Social Sciences ............... 6
   1. Economics
   2. Geography
   3. Government
   4. History

IV. General and Health Sciences ............... 55
   a. 1. PE Activities (PE 101-161) .......... 4
      2. Health 210: Personal and Community
         Health ................................ 3
      3. Laboratory Science
         a. Biology (113-114, 283, 281, and
            (362, 381, or 311)) ................... 20
         b. Chemistry (111-112, 213, 215, 214 &
            (218 or 220) plus 321) ................ 20
      4. Mathematics (Math 113, 114) ........... 8

V. Major (Medical Technology Credits) ........... 30

VI. Electives .......................... 8 or 12
   1. Physics1 or .......................... 8
   2. Other Electives ........................ 12

120 or 124

General Studies Courses

LANGUAGE ARTS AND CULTURE

Art
LAC 273 Art for the Elementary School [3]
Prerequisite: Education 201. A developmental approach to creative
   teaching and learning that combines the principles of perception with
   visual communication. Intensive study and practice will focus on
   structuring multi-arts programs that meet the perceptual and cognitive
   needs of all children. Class meets six hours per week.

English
LAC 305 Children’s Literature [3]
Prerequisite: Twelve semester hours of English. Survey of children’s
   literature suitable for nursery school, kindergarten, and the elementary
   school. The historical development, types, representative authors and
   illustrations are studied. Critical analyses of selected works are made.
   The habits and interests of children at these levels are studied. The
   techniques of story telling and presentation of literature to children are
   studied and practiced.

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]
An interdisciplinary introduction to Latin America. Focus is placed
   upon crucial contemporary issues and their related cultural and
   historical origins, utilizing the perspectives and methods of the social
   sciences and humanities. Problems of social change and assimilation,
   nationalism, and international relations in selected areas are among the
   themes emphasized in the course.

LAC 152 Sub-Saharan Africa [3]
An interdisciplinary introduction to Sub-Saharan Africa. Focus is placed
   upon crucial contemporary issues and their related cultural and
   historical origins, utilizing the perspectives and methods of the social
   sciences and humanities. Problems of social change and assimilation,
   nationalism, and international relations in selected areas are among the
   themes emphasized in the course.

LAC 153 Asia and the Western Pacific [3]
An interdisciplinary introduction to Asia and the Western Pacific. Focus is placed
   upon crucial contemporary issues and their related cultural and
   historical origins, utilizing the perspectives and methods of the social
   sciences and humanities. Problems of social change and assimilation,
   nationalism, and international relations in selected areas are among the
   themes emphasized in the course.

LAC 154 North Africa and the Middle East [3]
An interdisciplinary introduction to North Africa and the Middle East.
   Focus is placed upon crucial contemporary issues and their related
   cultural and historical origins, utilizing the perspectives and methods of
   the social sciences and humanities. Problems of social change and
   assimilation, nationalism, and international relations in selected areas
   are among the themes emphasized in the course.

LAC 350 Comparative Cultures [3]
Prerequisite: Two LAC Regional Cultures courses or equivalents and
   permission of instructor. Cross cultural and interdisciplinary seminar
   examining significant contemporary themes that affect the Third
   World.

LAC 450 Independent Study in Regional Cultures [1-3]
Prerequisite: One LAC Regional Cultures course in the region of
   proposed study (or equivalent) and the permission of instructor.
   Individual study of some aspect of the Third World, focusing on a
   specific theme and/or area. The student is expected to produce at least
   one major piece of written work during the semester.

Speech
LAC 355 Oral Interpretation in the Elementary School [3]
Pre- or corequisite: LAC 305. 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
   College of Arts and Sciences offerings scheduled for College of
   Professional Studies students.)

SOCIAL SCIENCES

Anthropology, economics, geography, government, history, psychology, sociology, et cetera (see standard
   College of Arts and Sciences offerings scheduled for College of
   Professional Studies students.)

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.

Health Science
GHS 401 Clinical Chemistry and Biology [30]
Prerequisite: Acceptance by an ASCP -accredited School of Medical
   Technology. Theory and procedures of clinical chemistry, radioisotope
   techniques, clinical bacteriology, parasitology, mycology, histology,
   cytology, serology, hematology, and urinalysis. Practical experience in
   performing clinical laboratory procedures.
   Biology, chemistry, physics, et cetera (see standard College
   of Arts and Sciences offerings scheduled for College of
   Professional Studies students.)

1American Society of Clinical Pathologists recommends physics.
2American Society of Clinical Pathologists.
Sample Schedule in Health and Physical Education

Freshman Year—1st Semester

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<th>Course</th>
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<tr>
<td>Biology 124</td>
<td>4</td>
</tr>
<tr>
<td>English 101</td>
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<tr>
<td>History 121</td>
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<tr>
<td>PE 201</td>
<td>3</td>
</tr>
<tr>
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<td><strong>Total</strong></td>
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</table>

Freshman Year—2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Biology 125</td>
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</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>History 122</td>
<td>3</td>
</tr>
<tr>
<td>Reg. Cult. or For. Lang.¹</td>
<td>3-4</td>
</tr>
<tr>
<td>Health 210</td>
<td>3</td>
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<tr>
<td>PE 100 series</td>
<td>1</td>
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<td><strong>Total</strong></td>
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</table>

Sophomore Year—1st Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Education 201</td>
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<tr>
<td>English 206</td>
<td>3</td>
</tr>
<tr>
<td>Reg. Cult. or For. Lang.¹</td>
<td>3-4</td>
</tr>
<tr>
<td>Health 205</td>
<td>3</td>
</tr>
<tr>
<td>PE 206</td>
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<tr>
<td>PE 100 series</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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Sophomore Year—2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Education 202</td>
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<tr>
<td>English 206</td>
<td>3</td>
</tr>
<tr>
<td>LAC 365, Speech 151 or 152</td>
<td>3</td>
</tr>
<tr>
<td>PE 222</td>
<td>3</td>
</tr>
<tr>
<td>PE 316</td>
<td>3</td>
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Junior Year—1st Semester

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Education 301</td>
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<tr>
<td>Reg. Cult. or Soc. Studies</td>
<td>3</td>
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<tr>
<td>PE 302</td>
<td>3</td>
</tr>
<tr>
<td>PE 308</td>
<td>3</td>
</tr>
<tr>
<td>PE 100 series</td>
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<tr>
<td>Electives</td>
<td>3</td>
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<td><strong>Total</strong></td>
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Junior Year—2nd Semester

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<thead>
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<tbody>
<tr>
<td>Education 313</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>PE 304</td>
<td>3</td>
</tr>
<tr>
<td>PE 450</td>
<td>3</td>
</tr>
<tr>
<td>PE 100 series</td>
<td>2</td>
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Senior Year—1st Semester

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PE 306</td>
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</tr>
<tr>
<td>PE 450</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
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<td>PE 100 series</td>
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<tr>
<td>Electives</td>
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Professional Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Education 436</td>
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<tr>
<td>Health 401</td>
<td>3</td>
</tr>
<tr>
<td>PE 470</td>
<td>3</td>
</tr>
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<td><strong>Total</strong></td>
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</table>

Total Hours: 128

¹Replace courses exempt with courses from I.D.
²Only six required here for those taking the regional cultures sequence. World History may be one of the courses.
³Men 106 and 107 or 141; women 106 and 141
⁴May earn up to four credits in Directed Field Experiences, Education 444-447. Register concurrent with or subsequent to courses requiring field experiences.

Continued on page 97
Specific requirements for the degree of Bachelor of Science in education with a major in health and physical education are as follows:

I. Language Arts and Culture ................. 26 or 27
   A. English
      1. English Composition (101-102) .... 6
   B. Speech—Select one ....................... 3
      1. Principles of Effective Speaking (151)
      2. Public Speaking (152)
      3. Oral Interpretation (LAC 355)

II. Social Studies ............................... 12-15
   A. History
      1. American (Hist 121, 122) ......... 6
   B. Other subjects ......................... 9
      1. Anthropology
      2. Economics
      3. Geography
      4. Government
      5. History
      6. Sociology

III. General and Health Sciences ................. 19
    A. Personal and Community Health (Health 210) .... 3
    B. P.E. Activities (PE 100 Series) ......... 4
    C. Mathematics ............................. 4
    D. Laboratory Science (Biol 124-125) .... 8

IV. Professional Sequence ........................ 30
    Education 201, 202, 301, 313, 436, and .... 21
    Health 401 and Physical Education 302, 470 ... 9

V. Major ........................................ 33
    Health 205 ................................ 3
    P.E. Activities (Additional hours from 100 series) 4
    Physical Education 201, 206, 222, 304, 306, 
    308, 316, 450, 460 .......................... 26

VI. Open Electives ................................ 5-7

Total Minimum Semester Hours .................. 128

Health Courses

205 General Safety [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 lecture; three laboratory hours.

210 Personal and Community Health [3]
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 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. Not for health and physical 
education majors.

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 responsibilities 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 knowl-
edge of automobile operation, traffic laws and regulations. Includes 
troduction to laboratory experiences in the use of psycho-physical 
and psychological tests in the development of driving skills, practice 
driving instruction and teaching. Two lecture hours, three laboratory 
hours.

Physical Education Courses

Activity Courses (101-161). 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. May be counted toward a degree in the 
College of Professional Studies. Cannot be counted within the 
hours for a degree in the College of Arts and Sciences.

Dance
107 Folk, Square and Social Dance (1)
141 Beginning Modern Dance (1)
142 Intermediate Modern Dance (1)
143 Advanced Modern Dance (1)

Individual Sports
105 Aerobics, Basic Conditioning, Cross Country and Track (1)
106 Beginning Gymnastics (1)
116 Combative Sports, Games, Unarmed Combat, and Wrestling (1)
117 Beginning and Intermediate Swimming (1)
118 Senior Life Saving (1)
122 Intermediate Tennis (1)
133 Tennis (1)
140 Golf (1) (A student fee is collected.)
151 Badminton and Tennis (1)
161 Archery and Golf (1)

Team Sports
101 Soccer and Volleyball (1)
111 Basketball and Soccer (1)
114 Speedball and Softball (1)
121 Flag Football and Basketball (1)
124 Basketball and Softball (1)
131 Volleyball and Field Hockey (1)

Recreational Activities
115 Recreation—Fishing and Camping (1) ($20.00 Fee)
119 Recreation—Trap and Skeet Shooting (1) ($20.00 Fee)
120 Recreation—Orienteering, Backpacking and Cookery (1)

201 Professional Dimensions of Physical Education [3]
An overview of the field of physical education and its relationships to 
health, recreation and other academic disciplines provides the major 
with an introduction to the field.

Physical Education courses are continued on the next page.
206 Gymnastics for Children and Youth [2]
Prerequisite: Physical Education 106 or permission of instructor. The study of the principles, analyses, fundamentals and progressions in teaching gymnastics and tumbling to children and youth or pre-school through secondary school age. Field experiences are included. One lecture, three activity hours.

211 Sports Officiating and Intramural Administration [3]
Prerequisite: Physical Education 201. The practical application of officiating techniques and the organization of a sound intramural program. Two lectures, three laboratory hours.

222 Kinesiology [3]
Prerequisite: Biology 124, 125, or permission of instructor. Designed to acquaint the student with the study of human movement. Fundamental joint movement, servomotor control, body mechanics, kinesthetic awareness, kinematics, kinetics and cinematographic analysis will be emphasized. Field experiences may be required. Three hours lecture, one laboratory hour.

302 Physical Education for the Elementary School [3]
Prerequisite: Physical Education 222. 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 in public schools are required.

304 Sport, Culture and Society [3]
Prerequisite: Physical Education 201 or permission of instructor. Deals with the impact of sport on society from historical, political, economic and cultural viewpoints.

306 Psychomotor Learning [3]
Prerequisites: Biology 124, 125, Education 202, or permission of instructor. The study of one of man's three educational domains. The content of the course will emphasize psychomotor learning, perceptual motor skill, movement behavior, learning theory motivation, personality and human performance. Field experiences may be required.

308 Developmental Physical Education [3]
Prerequisite: Completion of laboratory science requirement or permission of instructor. This course will be a synthesis of the developmental processes of the human as it relates to movement and exercise. An in-depth study of various chronic or functional inadequacies which may interfere with the individual's successful participation will be included. Field experiences may be required.

316 Recreation and Outdoor Education [3]
Prerequisites: Physical Education 115 and 119. Techniques of recreational leadership: community resources, supervision and evaluation methods of converting leisure into useful and cultural achievements. Participation in such outdoor recreational skills as camping, map reading, firearms safety, hand loading trap and skeet shooting, angling techniques, fishing and archery. Two lectures, three laboratory hours, ($20.00 fee)

342 Creative Dance for Children [3]
Study of dance as an expressive medium for children; emphasis on concepts and principles, methods and materials and how they can be adapted to the classroom situation. Consideration given to dance for children with special education problems.

410 Psychology of Sport and Coaching [3]
Illustrates the latest research, trends, and techniques of modern coaching. The course will emphasize practical as well as scientific principles of coaching.

450 Physiology of Exercise [3]
Prerequisites: Biology 124, 125, Physical Education 222. A study of the physiological response of the human body to both acute and chronic exercise stress.

480 Management and Evaluation in Physical Education [3]
Prerequisites: Physical Education 201, 302, 304, 306, 308. The course deals with management and evaluation of the total physical education program in elementary and secondary schools. Administrative principles, organizational details and evaluation procedures are viewed in terms of health and physical education classes, intramural sports and athletics.

Prerequisite: Physical Education 302. Included are methods and materials, audio-visual aids, safety precautions, evaluation and other topics related to the teaching and guidance of youth in secondary school physical education. Field experiences in public schools are required.

Department of Nursing

Professor Cohelan (Chairman)
Assistant Professors Bash, DiLoreto, Millonig, Mullin, Powell, Turner, Weed
Instructor Harper
Lecturers Grad, Martens, Redmond

Requirements for the Major
Bachelor of Science Degree. The nursing program is designed to meet the challenge of a changing and increasingly more demanding health care delivery service. Graduates are prepared to function as professional nurses in hospitals, nursing homes, in community health agencies and in the home.

Emphasis is placed on early detection of potential health problems, care of patients, health maintenance in ambulatory services and enlarged responsibilities for nurses.

Registered nurses may obtain a maximum of 30 hours of credit toward the baccalaureate degree by successful performance on Advance Placement Examinations.

Students at their own expense are required to acquire personal liability group insurance policies as soon as they are scheduled for their first clinical assignment in a hospital, nursing home or health agency.

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

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<thead>
<tr>
<th>I. Language Arts and Culture</th>
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<tr>
<td>(a) English</td>
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<tr>
<td>Composition and Introduction to Literature 101-102</td>
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<tr>
<td>(b) Speech</td>
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<tr>
<td>Principles of Effective Speaking 151</td>
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</tr>
<tr>
<td>(c) Humanities</td>
<td>6</td>
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<tr>
<td>Art (appreciation, history, criticism or theory)</td>
<td></td>
</tr>
<tr>
<td>Music (appreciation, history, criticism or theory)</td>
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<tr>
<td>Regional Cultures (151, 152, 153, 154)</td>
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</tr>
<tr>
<td>Literature (in addition to 6 hours of English 101-102)</td>
<td></td>
</tr>
<tr>
<td>Philosophy, Language, Ethics, Archeology or Humanities</td>
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<tr>
<th>II. Social and Behavioral Sciences</th>
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<tbody>
<tr>
<td>(a) Sociology</td>
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<tr>
<td>(b) Psychology</td>
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http://catalog.gmu.edu
Sample Schedule for Nursing Majors

First Semester
- English 101 3
- Speech 3
- Psychology 100 3
- Biology 124 4
- PE 1
  Total 14

Second Semester
- English 102 3
- Sociology 3
- Humanities 3
- Biology 125 4
- PE 1
  Total 14

Third Semester
- Psychology 3
- Chemistry 103 4
- Elective 3
- Nursing 211 3
- Nursing 250 3
  Total 16

Fourth Semester
- Humanities 3
- Chemistry 104 4
- Biology 185 4
- Nursing 260 2
- Nursing 262 2
- PE 1
  Total 18

Fifth Semester
- Nursing 301 4
- Nursing 311 3
- Nursing 321 3
- Electives 6
  Total 16

Sixth Semester
- Nursing 302 4
- Nursing 312 3
- Nursing 322 3
- Electives 6
  Total 16

Seventh Semester
- Nursing 411 4
- Nursing 421 4
- Nursing 431 4
- Statistics 3
- PE 1
  Total 16

Eighth Semester
- Nursing 460 2
- Nursing 462 3
- Nursing 470 4
- Nursing 472 3
- Elective 2
  Total 15

III. Mathematics and Natural Sciences .......... 23
   (a) Chemistry 103-104 or 111-112 .......... 8
   (b) Biology
      Anatomy and Physiology 124-125 ...... 8
      Microbiology 185 ................. 4
   (c) Mathematics
      Introduction to Statistics 252-254 ...... 3

IV. Physical Education Activities (100-level) ....... 4
V. Major .................................. 54
VI. Electives ................................ 17
   Total Hours ................................ 122

Nursing Courses

211 Nursing: A Practice Discipline [3]
An introduction to nursing as an emerging discipline, profession and occupation. Emphasis is placed on the development of a dynamic concept of nursing and essential behaviors of members of the profession.

250 Systems of Health Care [3]
Consideration of systems of health care of individuals and groups including pertinent scientific and cultural norms. Examination of ranges of physiological and psychological alterations treated or contained within systems of health care.

260 Design and Control of Nursing Systems [2]
Introduction to knowledge needed in designing, implementing and evaluating nursing systems for individuals and small groups. Clinical practice arranged.

262 Technologies in Nursing [2]
Skills required in the assessment, design and control of nursing systems. Clinical practice arranged.

301, 302 Elements of Pathology and Medical Therapeutics [4, 4]
Content which is foundational to nursing: pathology in psychological, sociological and physiological systems; medical technologies, selected modes of medical diagnosis and treatment.

311, 312 Nursing of Individuals [3, 3]
Design and control of nursing systems; purposeful planning to bring together essential elements to form a coherent nursing system. Clinical application to individuals focusing on the variables of age, developmental stages, life cycle events, roles, health disorders and the health situation.

321, 322 Nursing of Small Groups [3, 3]
Design and control of nursing systems; purposeful planning which brings together essential elements to form a coherent nursing system. Clinical application to small groups and families focusing on the variables of age, developmental stages, life cycle events, roles, health disorders and the health situation.

411 Scholarship Dimensions of Nursing [4]
Focus is on the body of nursing knowledge: methods of development and examination of nursing knowledge; use in education, scholarship and practice functions in the discipline. Clinical practice arranged.

421 Group Phenomena [4]
Content essential for use in nursing: principles of community organization, administration and group dynamics.

431 Nursing of Large Groups [4]
Development of nursing systems when the client is a population. Clinical practice arranged.

460 Nursing in the Systems of Health Care [2]
Synthesis of knowledge of nursing directed to increased understanding of nursing as a subsystem within the larger health care system.

482 Practicum: Nursing in Health Care [3]
Application of techniques of systems control in a setting in which patients possess a described range of attributes.

470 Nursing Systems for Individuals and Small Groups [4]
Synthesis of knowledge of nursing systems for individuals and groups. Focus on clinical settings in which direct care is provided and in which leadership is exercised in directing others.

472 Practicum: Nursing Systems [3]
Clinical experience based on student’s interest and goals in nursing individuals and groups who possess a defined range of attributes.

455, 485 Special Problems in Nursing [3, 3]
Prerequisite: Senior standing and permission of instructor. Student will define and examine a nursing problem of particular interest. Clinical practice arranged.

494, 495 Directed Readings in Nursing [2, 2]
Prerequisite: Senior standing and permission of the instructor. A rigorous examination of the literature on a specialized topic in nursing practice, education or scholarship. Conducted in consultation with faculty.

499 Independent Study in Nursing [1-3]
Prerequisite: Permission of the Instructor. Individual study of a particular problem area in nursing research, theory development or education under the direction of faculty. Clinical practice arranged.
The Rector and Visitors

John C. Wood, **Rector**
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Elias Blake, Jr.
Harriet F. Bradley, **Secretary**
Anita L. Capps
Alvin E. Conner, M.D.
A. George Cook, III.
John J. Corson
William C. Furgale
John T. Hazel, Jr., **Vice Rector**
Carl V. Lyon
John W. Macy, Jr.
Warren J. Pace
Lutrelle F. Parker, Sr.
Lester G. Sturgill
Curril H. Tiffany

Louise F. Lowe, **Executive Assistant**

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Faculty and Academic Standards Committee: Bishop, Blake, Cook, *Corson, Macy, Pace
Finance and Planning Committee: Bradley, Conner, Furgale, Hazel, *Sturgill
Nominating Committee: *Bradley, Lyon, Parker, Wood
Student Affairs Committee: Capps, Cook, Lyon, *Tiffany
Ad Hoc Committee on Long-Range Land Use Planning: Bradley, Conner, Lyon, *Parker

*Chairman

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Verigl H. Dykstra, Ph.D., **President**

**Affirmative Action**
Louise F. Lowe, M.A., **Special Assistant to the President**

**Minority Affairs**
Darius L. Swann, Ph.D., **Special Assistant to the President**

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Lee J. Betts, Ed.M., **Acting Director**
Lewis C. Jones, Jr., M.S.T., **Assistant Director (on leave)**

**Information Services**
Alexandra Gerry, B.A., **Acting Director**

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Ralph C. Baxter, Ph.D., **Associate Vice President**

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Helen S. Garson, Ph.D., **Associate Dean**

**College of Professional Studies**
Clayton M. Schindler, Ph.D., **Dean**

**Graduate School**
William S. Willis, Doct. Univ. (Paris), **Dean**
Frederick J. Dorey, Ph.D., **Assistant to the Dean**

**Summer Session**
William C. Johnston, Ph.D., **Dean**

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Richard B. O'Keeffe, M.S.L.S., **Assistant Director**

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Victor Bloecher, Jr., M.A., **Director**

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Michael J. McDermott, Jr., Ph.L., **Registrar**
Alileen L. Ferguson, B.S., **Recorder**

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**Administrative Data Processing**
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James R. Conner, **Director**

**Bursar**
Benjamin H. Dozier, M.S.C., **Bursar**

**Personnel**
John R. Hitenbrand, B.S., **Director**

**Purchasing**
Wilford L. Clark, **Agent**

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Sheppard B. Kominars, Ph.D., **Vice President**

**Development and Alumni Affairs**
J. William Gephart, M.S., **Director**

**Facilities Planning**
Joseph I. Gurfein, M.S., **Director**

**Institutional Analysis**
John P. Sullivan, M.A., **Director**

**Printing & Publications**
Patrick B. Alexander, B.A., **Coordinator**

**Projects**
Michael T. Fish, M.A., **Coordinator**

**Office of the Dean for Student Services**
Donald J. Mash, Ph.D., **Dean**

**Athletics**
Raymond H. Spuhler, M.A., **Director**

**Career Planning, Placement, and Financial Aid**
Charles A. Repp, Ed. D., **Director**

**Counseling and Psychological Services Center**
Walter J. Moretz, Jr., Ph.D., **Director**

**Student Union**
Kenneth E. Bumgarner, M.A., **Director**

**Veterans Affairs**
Carol A. Elstad, **Coordinator**

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Emeritus Faculty
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Retired Faculty
Marion Bartlett, B.S., Ph.D., Associate Professor of Psychology
Hubert Merrill Cole, B.S., M.S., Associate Professor of Mathematics
Robert Wendell Eaves, A.B., M.A., Ed.D., Professor of Education

Adams, Henry Patteson, Professor, Vice President for Business and Finance, B.S., United States Naval Academy, 1939.
Aebischer, Louis John, Associate Professor of Education, Director of Admissions (1st semester). B.S., Syracuse University, 1936; M.S., Syracuse University, 1947; Ed.D., The George Washington University, 1971.
A'Hearn, Maxine Clara, Lecturer in Biology, B.S., Creighton University, 1961; M.S., University of Wisconsin, 1962; Ph.D., University of Wisconsin, 1966.
Ali, Monica Marie, Lecturer in Chemistry, A.B., Emanuel College, 1963; M.S., Georgetown University, 1967; Ph.D., Georgetown University, 1971.
Allen, John Ashley, Assistant Professor of Psychology, A.B., Duke University, 1963; M.S., North Carolina State University, 1969; Ph.D., North Carolina State University, 1971.
Altman, Charlotte Hall, Associate Professor of Psychology, B.A., University of Minnesota, 1929; M.A., Clark University, 1933; Ph.D., University of Chicago, 1954.
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.
Audilet, Devereux Oldfield, Lecturer in Biology, B.S., Mary Washington College, 1965; Ph.D., Georgetown University, 1973.

Austin, Virginia LaRose, Assistant Professor of Education, B.S.M., DePauw University, 1931; M.Ed., University of Maryland, 1954.
Bash, Deborah M., Assistant Professor of Nursing, B.S.N., Hunter College, 1961; M.S.N., the Catholic University of America, 1969.
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Sundell, Michael Gordon, Professor of English, Chairman, Department of English. A.B., Hamilton College, 1956; M.A., Yale University, 1958; Ph.D., Yale University, 1962.

Swann, Darius Laander, Assistant Professor of Religion, Special Assistant to the President for Minority Affairs. A.B., John Johnson Smith University, 1945; B.D., Johnson Smith University, 1948; S.T.M., Union Theological Seminary, 1959; Ph.D., University of Hawaii, 1974.

Sweeney, Mary Jane, Instructor, Librarian. B.A., College of William and Mary, 1972; M.S., Simmons College, 1974.

Sweitzer, Edward Martin, Lecturer in Biology. B.S., Millersville State College, 1965; M.S., University of Maryland, 1968; Ph.D., University of Maryland, 1970.

Tamke, Virginia, Assistant Professor of History. B.A., Tulane University, 1959; M.A., University of Delaware, 1971.


Taub, Stephan Robert, Professor of Biology. Chairman, Department of Biology. A.B., University of Rochester, 1955; Ph.D., Indiana University, 1960.

Tawani, Nicholas John, Associate Professor of Sociology. B.A., Temple University, 1951; B.D., Reformed Episcopal Seminary, 1957; M.A., University of Maryland, 1965; Ph.D., University of Maryland, 1969.

Taylor, Thomas James, Lecturer in English. B.A., University of Akron, 1971; M.A., University of California, 1972.


Turek, Ralph Benjamin, Acting Assistant Professor of Music. B.S., Duquesne University, 1966; M.M., Duquesne University, 1970.

Turner, Joan, Assistant Professor of Nursing. B.S., Hampton Institute, 1969; M.S.N., The Catholic University of America, 1973.

Turner, Robert Amrine, Associate Professor of Mathematics. B.A., United States Military Academy, 1933; M.A.T., Duke University, 1936.

Tyr, Zita Eileen, Associate Professor of Psychology. B.A., Texas Christian University, 1959; Ph.D., Texas Tech University, 1968.


Vahle, Cornelius Wendell, Jr., Lecturer in History. B.A., St. John's University, 1954; M.A., The Catholic University of America, 1957; Ph.D., Georgetown University, 1967.

Veninga, Catherine Williams, Assistant Professor of English. B.A., Baylor University, 1969; M.A., Rice University, 1973; Ph.D., Rice University, 1973.

Villavicencio, Laura Nunez, Lecturer in Spanish. Doctor, Universidad de La Habana, 1946; M.A., University of Maryland, 1967; Ph.D., University of Maryland, 1972.


Wall, James Robert, Professor of Biology. B.S., Virginia Polytechnic Institute and State University, 1951; Ph.D., Cornell University, 1955.

Walters, American, Associate Professor of English. A.B., Howard Payne College, 1938; M.A., University of Arkansas, 1947; Ph.D., University of Illinois, 1962.

Walther, Charles Robert, Jr., Professor of Chemistry, Chairman, Department of Chemistry. B.A., University of Virginia, 1943; Ph.D., University of Virginia, 1950.


Weed, Frances Stewart, Assistant Professor of Nursing. B.S., Duke University, 1958; M.S.N., The Catholic University of America, 1966.


Welanetz, Ludolph Frisch, Assistant Professor of Engineering. M.E., Cornell University, 1928; M.M.E., Cornell University, 1936; Ph.D., Cornell University, 1938.


Wilhelmi, Mary Charlotte, Assistant Professor, Administrative Assistant and Public Information Officer, The Consortium for Continuing Education in Northern Virginia, B.S., Iowa State University, 1950; M.A., Virginia State University, 1950; M.A., Virginia Polytechnic Institute and State University, 1973.


Williams, Marden Emerson, Assistant Professor of Sociology. B.A., Moravian College, 1946; J.D., University of Wisconsin, 1949; B.D., University of Dubuque, 1959; S.T.M., Boston University, 1966; Ph.D., University of Iowa, 1972.

Willis, William Scott, Professor of French, Dean of the Graduate School. B.A., University of Virginia, 1942; M.A., University of Virginia, 1947; Docteur de l'Université, University of Paris, 1951.

Wilson, Arlene Ethel, Lecturer in Economics. B.A., St. Lawrence University, 1955; A.M., University of Michigan, 1959; Ph.D., New York University, 1974.


Wilson, John William, III, Assistant Professor of Biology. B.A., Amherst College, 1966; Ph.D., University of Chicago, 1972.

Wilson, Laura Williamson, Assistant Professor of Education. B.S., East Carolina University, 1950; M.A., Appalachian State University, 1966; Ed.D., The George Washington University, 1972.

Wolff, Clarence Christopher, Lecturer in Biology. B.S., St. Vincent College, 1962; M.S., University of Nebraska, 1966; Ph.D., Virginia Polytechnic Institute and State University, 1972.


Woodson, Jon Stanton, Acting Assistant Professor of English. B.A., University of Rhode Island, 1968; M.A., University of Rhode Island, 1968.


Younouchot, Gene Raymond, Assistant Professor of Chemistry. B.S., California Polytechnic College, 1963; Ph.D., University of Missouri, 1969.


Zieg, Kermit Charles, Jr., Associate Professor of Business Administration. B.S., Indiana University, 1965; M.A., Ohio State University, 1966; Ph.D., Ohio State University, 1968.

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Foundations, Associations, Departmental Scholarships, and Awards

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Vice President ...................................... Adele Wilkinson
Treasurer ........................................... Benjamin H. Dozier
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The "GM" Club Foundation is formed for education, charitable and social purposes: specifically for creating lasting social and educational relationships among all wearers of the "GM" Varsity letter award, for encouraging participation in all sports and for serving George Mason University to enrich the physical facilities, equipment and programs associated with intramural and intercollegiate competition.

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Vice President for Activities ............... Linda Gamble Gentile
Treasurer ........................................... Joel A. Gabriel
Alumni Newsletter Editor .................... E.J. Jarvis
Executive Director .............................. Gail G. Johnson

Additional Information

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Student Education Association Endowment Scholarships Fund. This fund provides grants for a limited number of eligible George Mason University students of demonstrated academic achievement, during their student teaching semester.

Woodrow Wilson Foundation. The Woodrow Wilson Foundation provides funds for graduate fellowships to students planning college teaching careers in a liberal arts field. Although lack of funds curtailed grants in recent years, seniors interested in applying for such grants as become available must be nominated by one of their professors in October. Consult the departmental adviser or the local Woodrow Wilson campus representative for further information.

Fulbright-Hays Award. Students seeking information regarding these awards which provide funds for pre-doctoral study or research abroad should contact Dr. Angela Khoury, George Mason University Program Adviser.

University Awards

Literary, 1973-74

Fiction:
First Prize: Robert Baush

Poetry:
First Prize: Ruthellen Quillen
Second Prize: Jack Burgess

Wall Street Journal Award—1974
Linda Podonsky
John C. Weller

Weber H. Peterson Memorial Award—1974
William A. Williams

Gayle C. Solomon Memorial Prize in Mathematics & Physics—1974
Christine Jones
Robert W. Rogers

Athletic, 1973-74

Most Valuable Athletes—John Long and Mike Macdonald
Most Valuable Basketball Player—Herb Estes
Most Valuable Baseball Player—Joe Anderson
Most Valuable Soccer Player—Rabih Chatila
Most Valuable Golfer—Dave Allen and John Long
Most Valuable Tennis Player—Jim Black and Mike Macdonald
Most Valuable Wrestler—John Long
Most Valuable Fencer—Mark Strickland
Most Valuable Cross-Country—Ken Brannon

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Telephone Directory

Telephone Numbers

George Mason University .... 323-2000
Admissions .................. 2102
Athletic Director .......... 2320
Biology Department ......... 2181
Bookstore-Main Campus ...... 2169
Bookstore-North Campus ...... 2443
Bursar ....................... 2115
Business Administration Department .... 2413
Campus Ministry .......... 2160
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For numbers not listed telephone (703) 323-2000.
George Mason University is located on the southern boundary of Fairfax City. To reach the Main Campus, take the Capital Beltway (Route 495) to Exit 6 West (Route 236) to Fairfax City, and go south on University Drive or south on Route 123 (approximately 1½ miles), or take Interstate Route 66 to the Fairfax exit (Route 123 South).
INTER-OFFICE MEMORANDUM

TO: Registrars Office
FROM: John M. Smith, General Studies
SUBJECT: Course Description

General and Health Sciences 411: SPECIAL HAZARDS CONTROL. [3]
The study and analysis of the properties of industrial materials,
such as combustible metals, cryogenic materials, plastics, radio-
active materials, flammable liquids, gases and dusts, which re-
quire special handling by safety services during an emergency
with emphasis on special fire protection treatment.