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Inquiries will receive attention if addressed to the administrative offices below at James Madison University, Harrisonburg, Virginia 22801.

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<td>Director of Alumni Services</td>
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<td>Dean of the School in which the degree is offered</td>
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<td>Evaluation of Credits</td>
<td>Dean of Admissions and Records</td>
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<td>Dean of Summer School</td>
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<td>Transcripts</td>
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</table>

The University can be reached by telephone at all times, Harrisonburg (703) 433-6211
The diffusion of knowledge is the only guardian of true liberty.

James Madison
Accreditation

James Madison University is accredited by: Southern Association of Colleges and Schools, National Council for Accreditation of Teacher Education for Preparation of Elementary Teachers and Secondary Teachers with the Master’s Degree as the Highest Degree Offered, Virginia State Board of Education, National Association of Schools of Music.


and a corporate member of: American Association of University Women.
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### UNIVERSITY CALENDAR 1977–78

#### Fall Semester, 1977

#### AUGUST

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- Aug. 28—Residence Halls open 9:00 a.m. for Returning Students. Dining Hall opens 4:30 p.m.
- Aug. 29—Residence Halls open 9:00 a.m. for New Students.
- Aug. 29—Registration of Undergraduate and Graduate Students. For detailed dates and times, see Schedule of Classes, Fall Semester, 1977.
- Aug. 30—Registration of Undergraduate Students. For detailed dates and times, see Schedule of Classes, Fall Semester, 1977.
- Aug. 31—Classes meet as scheduled.

#### SEPTEMBER

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</table>

- Sept. 2—Last day to submit an application for a degree if graduation requirements are to be met in October.
- Sept. 5—Labor Day. Classes meet.
- Sept. 7—Last day on which applications for course changes may be made without payment of $5.00 fee. Last day to add a new course to first semester program.
- Sept. 9—Student teachers for third or fourth block, Spring Semester, 1978, must complete the student teaching application.
- Sept. 10—Government Day.
- Sept. 22—Last day to change a first block course from credit/no-credit to letter grade or letter grade to credit/no-credit.
- Sept. 28—Last day to submit an application for a degree if graduation requirements are to be met in December.

#### OCTOBER

<table>
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- Oct. 1—Parents’ Day.
- Oct. 5—Last day to change a semester course from credit/no-credit to letter grade or letter grade to credit/no-credit.
- Oct. 5—Last day to drop a first block course.
- Oct. 18—First block courses end.
- Oct. 20—Mid-semester grades due in Records Office.
- Oct. 20—Classes begin second block courses.
Oct. 24—Holiday. Classes (undergraduate and graduate) do not meet.

Oct. 25—First block course grades due in Records Office.

Oct. 29—Homecoming.

Nov. 2—Last day on which applications for course changes for second block courses may be made without payment of $5.00.

Nov. 9—Last day to drop a semester course.

Nov. 9—Last day to change a second block course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Nov. 23—Thanksgiving vacation begins 5:00 p.m. Dining Hall closes 2:00 p.m. Residence Halls close 5:00 p.m.

Nov. 27—Residence Halls open 12:00 Noon. Dining Hall opens 4:30 p.m.

Nov. 28—Thanksgiving vacation ends and classes resume.

Dec. 2—Last day to drop a second block course.

Dec. 9—Last day of classes.

Dec. 9—Last day for students to complete 1977 Spring Semester and 1977 Summer Term “Incomplete” grades and for faculty to turn in these grades to the Records Office.

Dec. 10—Reading Day.

Dec. 12–16—Final Examinations.

Dec. 16—Residence Halls close 5:00 p.m. Dining Hall closes 2:00 p.m.

Dec. 17—Graduation (no commencement exercise).

Spring Semester, 1978

Jan. 8—Residence Halls open 12:00 Noon. Dining Hall opens 4:30 p.m.

Jan. 9—Registration of Undergraduate and Graduate Students. For detailed dates and times, see Schedule of Classes, Spring Semester, 1978.

Jan. 10—Registration of Undergraduate Students. For detailed dates and times, see Schedule of Classes, Spring Semester, 1978.
Jan. 11—Classes meet as scheduled.
Jan. 18—Last day on which applications for course changes may be made without payment of $5.00 fee. Last day to add a new course to second semester program.
Jan. 21—Student teachers for first or second block, Fall Semester, 1978, must complete the student teaching application.
Jan. 30—Last day to submit an application for a degree if graduation requirements are to be met in March.

**FEBRUARY**

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Feb. 1—Last day to change a third block course from credit/no-credit to letter grade or letter grade to credit/no-credit.
Feb. 13—Last day to submit an application for a degree if graduation requirements are to be met by the end of the Spring Semester, 1978.
Feb. 15—Last day to change a semester course from credit/no-credit to letter grade or letter grade to credit/no-credit.
Feb. 15—Last day to drop a third block course.
Feb. 28—Third block courses end.

**MARCH**

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Mar. 3—Mid-semester grades due in Records Office.
Mar. 3—Mid-semester recess begins 5:00 p.m. Dining Hall closes 2:00 p.m. Residence Halls close 5:00 p.m.
Mar. 6—Third block course grades due in Records Office.
Mar. 12—Residence Halls open 12:00 Noon. Dining Hall opens 4:30 p.m.
Mar. 13—Classes resume. Fourth block courses begin.
Mar. 17—Celebration of Founders Day (March 14).
Mar. 17–24—The Fine Arts Festival.
Mar. 20—Last day on which applications for course changes for fourth block courses may be made without payment of $5.00 fee.
Mar. 29—Last day to change a fourth block course from credit/no credit to letter grade or letter grade to credit/no-credit.
Mar. 29—Last day to drop a semester course.
Oct. 24—Holiday. Classes (undergraduate and graduate) do not meet.
Oct. 25—First block course grades due in Records Office.
Oct. 29—Homecoming.

Nov. 2—Last day on which applications for course changes for second block courses may be made without payment of $5.00.
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Nov. 27—Residence Halls open 12:00 Noon. Dining Hall opens 4:30 p.m.
Nov. 28—Thanksgiving vacation ends and classes resume.

Dec. 2—Last day to drop a second block course.
Dec. 9—Last day of classes.
Dec. 9—Last day for students to complete 1977 Spring Semester and 1977 Summer Term “Incomplete” grades and for faculty to turn in these grades to the Records Office.
Dec. 10—Reading Day.
Dec. 12–16—Final Examinations.
Dec. 16—Residence Halls close 5:00 p.m. Dining Hall closes 2:00 p.m.
Dec. 17—Graduation (no commencement exercise).

Spring Semester, 1978
Jan. 11—Classes meet as scheduled.
Jan. 18—Last day on which applications for course changes may be made without payment of $5.00 fee. Last day to add a new course to second semester program.
Jan. 21—Student teachers for first or second block, Fall Semester, 1978, must complete the student teaching application.
Jan. 30—Last day to submit an application for a degree if graduation requirements are to be met in March.

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Feb. 1—Last day to change a third block course from credit/no-credit to letter grade or letter grade to credit/no-credit.
Feb. 13—Last day to submit an application for a degree if graduation requirements are to be met by the end of the Spring Semester, 1978.
Feb. 15—Last day to change a semester course from credit/no-credit to letter grade or letter grade to credit/no-credit.
Feb. 15—Last day to drop a third block course.
Feb. 28—Third block courses end.

MARCH

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Mar. 3—Mid-semester grades due in Records Office.
Mar. 3—Mid-semester recess begins 5:00 p.m.
Dining Hall closes 2:00 p.m. Residence Halls close 5:00 p.m.
Mar. 6—Third block course grades due in Records Office.
Mar. 12—Residence Halls open 12:00 Noon.
Dining Hall opens 4:30 p.m.
Mar. 13—Classes resume. Fourth block courses begin.
Mar. 17—Celebration of Founders Day (March 14).
Mar. 17–24—The Fine Arts Festival.
Mar. 20—Last day on which applications for course changes for fourth block courses may be made without payment of $5.00 fee.
Mar. 29—Last day to change a fourth block course from credit/no credit to letter grade or letter grade to credit/no-credit.
Mar. 29—Last day to drop a semester course.
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<tr>
<td>Apr. 6</td>
<td>Honors Day.</td>
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<td>Apr. 14</td>
<td>Last day to drop a fourth block course.</td>
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<tr>
<td>Apr. 28</td>
<td>Last day of classes.</td>
</tr>
<tr>
<td>Apr. 28</td>
<td>Last day for students to complete Fall 1977 &quot;Incomplete&quot; grades and for faculty to turn in these grades to the Records Office.</td>
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<tr>
<td>Apr. 29</td>
<td>Reading Day.</td>
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<td>May 1-5</td>
<td>Final Examinations. Budget.</td>
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<tr>
<td>May 6</td>
<td>Graduation. Commencement exercises 10:00 a.m.</td>
</tr>
<tr>
<td>May 6</td>
<td>Dining Hall closes 2:00 p.m. Residence Halls close 5:00 p.m.</td>
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**May Session, 1978**

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<td>May 7</td>
<td>Residence Halls open 9:00 a.m. Dining Hall opens 4:30 p.m.</td>
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<td>May 8</td>
<td>Registration for May Session only. For detailed dates and times, see Schedule of Classes, Summer Session, 1978.</td>
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<tr>
<td>May 9</td>
<td>Classes meet as scheduled.</td>
</tr>
<tr>
<td>May 11</td>
<td>Last day to add a course. Last day on which applications for course changes may be made without a $5.00 fee.</td>
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<td>May 12</td>
<td>Last day to change a May Session Course from credit/no-credit to letter grade or letter grade to credit/no-credit.</td>
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<td>May 19</td>
<td>Last day to drop a course.</td>
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<tr>
<td>May 26</td>
<td>Final Examinations. Dining Hall closes 2:00 p.m.</td>
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<td>Residence Halls close 5:00 p.m.</td>
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**Summer Session, 1978**

*First Four-Week Term*

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<td>June 11</td>
<td>Residence Halls open 9:00 a.m. Dining Hall opens 4:30 p.m.</td>
</tr>
<tr>
<td>June 12</td>
<td>Registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1978.</td>
</tr>
<tr>
<td>June 13</td>
<td>Classes meet as scheduled. Last day to submit an application for a degree if requirements are to be met by the end of the Summer Session, 1978.</td>
</tr>
</tbody>
</table>
June 15—Last day to add a course for the First Four-Week Term. Last day on which applications for course changes for the Four-Week Term may be made without a $5.00 fee.
June 22—Last day to change a First Four-Week Term course from credit/no-credit to letter grade or letter grade to credit/no-credit.
June 29—Last day to drop a Four-Week Term course.
July 4—Holiday. Classes (undergraduate and graduate) do not meet.
July 7—Final Examinations for First Four-Week Term courses.

Eight-Week Term

June 11—Residence Halls open 9:00 a.m. Dining Hall opens 4:30 p.m.
June 12—Registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1978.
June 13—Classes meet as scheduled.
June 22—Last day to add a course for the Eight-Week Term. Last day on which applications for course changes for the Eight-Week Term may be made without a $5.00 fee.
June 26—Last day to change an Eight-Week Term course from credit/no-credit to letter grade or letter grade to credit/no-credit.
July 4—Holiday. Classes (undergraduate and graduate) do not meet.
July 11—Last day to drop an Eight-Week Term course.
Aug. 4—Final Examinations. Dining Hall closes 6:00 p.m.
Aug. 5—Residence Halls close 10:00 a.m.

Second Four-Week Term

July 10—Course changes and registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1978.
July 11—Classes meet as scheduled.
July 13—Last day to add a Second Four-Week Term course. Last day on which applications for course changes for the Four-Week Term may be made without a $5.00 fee.
July 18—Last day to change a Second Four-Week Term course from credit/no-credit to letter grade or letter grade to credit/no-credit.
July 26—Last day to drop a Second Four-Week Term course.
Aug. 4—Final Examinations. Dining Hall closes 6:00 p.m.
Aug. 4—Graduation. Commencement exercises 7:00 p.m.
Aug. 5—Residence Halls close 10:00 a.m.
THE VISITORS OF JAMES MADISON UNIVERSITY

Francis Bell, Jr., Rector
Harrisonburg

Martha S. Grafton, Vice Rector
Staunton

Robert L. Dolbeare
Richmond

Nellie L. Long
Edinburg

Walter J. McGraw
Richmond

J. Leonard Mauck
Marion

E. Guy Ridgely
Alexandria

Inez G. Roop
Richmond

James B. Spurlock, Jr.
Richmond

David H. Stovall
Virginia Beach

Winston O. Weaver
Harrisonburg

Alice E. Liggett, Secretary
INTRODUCTION TO

JAMES MADISON UNIVERSITY

The University became the State Teachers College at Harrisonburg in 1924 and continued under that name until 1938, when it was renamed Madison College in honor of the fourth President of the United States, James Madison. The university's administration and the Board of Visitors, the governing body of the University, have been primarily responsible for the direction and control of the institution. The University is committed to the highest standards of academic excellence and to the development of the whole person. It seeks to provide a comprehensive and diverse curriculum that will prepare students for personal and professional success. The University offers a wide range of undergraduate and graduate programs in a variety of disciplines. It is committed to the principle of intellectual inquiry and to the promotion of scholarship and research. The University is located in Harrisonburg, Virginia, and is an integral part of the larger community. It has a strong commitment to community service and civic engagement. In 1977, the institution received the name James Madison University, recognizing the great contributions of the university to the Commonwealth of Virginia.
INTRODUCTION TO JAMES MADISON UNIVERSITY

Purpose

James Madison University is a comprehensive university governed by a Board of Visitors. The University is financially aided by the Commonwealth of Virginia, and its program is coordinated with the master plan of the State Council of Higher Education.

The primary purpose of James Madison University is the development of citizens who can make positive contributions to society. The University is committed to excellence in the intellectual, cultural, social and professional growth of its students. J.M.U. also serves the citizens of the region in which it is located through its instructional, research and public service efforts. The University offers majors in most of the academic disciplines and in pre-professional and professional programs. It has a major responsibility to educate teachers, particularly for the schools of Virginia. James Madison University is authorized to confer the degrees of Bachelor of Arts, Bachelor of Science, Bachelor of Music Education, Bachelor of Business Administration, Bachelor of Fine Arts, Bachelor of Music, Master of Arts, Master of Science, Master of Arts in Education, Master of Science in Education, Master of Business Administration, Master of Arts in Teaching, Master of Education, and Master of Music Education.

History

James Madison University was established by the Virginia General Assembly in 1908 as the State Normal and Industrial School for Women. Since then, the objectives of the University have been frequently modified and its functions increased considerably. The University has been fully coeducational since 1966 and has offered graduate work at the master’s level since 1954.

The first president of the University was Julian Ashby Burruss. The University opened its doors to its first student body in 1909 with an enrollment of 209 students and a faculty of 15. Its first 20 graduates received diplomas in 1911.

In 1914 the name of the University was changed to The State Normal School for Women at Harrisonburg. Authorization to award the Bachelor of Science degree was granted in 1916. During this initial period of the University’s development, the campus plan was established and six buildings were constructed.
Dr. Samuel Page Duke became the second president of the University in 1919 upon the resignation of Dr. Burruss, who became President of Virginia Polytechnic Institute.

The University became the State Teachers College at Harrisonburg in 1924 and continued under that name until 1938, when it was named Madison College in honor of the fourth President of the United States. During Dr. Duke’s administration, nine major buildings were constructed and the University was authorized to confer the Bachelor of Arts and Bachelor of Science degrees in liberal arts. In 1946, men were first enrolled as regular day students.

Dr. G. Tyler Miller became the third president of the University in 1949, following the retirement of Dr. Duke. During Dr. Miller’s administration, from 1949 to 1971, the campus was enlarged by 240 acres and 19 buildings were constructed. Major curriculum changes were made and the University was authorized to grant Master of Arts and Master of Science in Education degrees in 1954; the Master of Science degree in 1960; and the Master of Arts degree in 1966. In 1966, by action of the Virginia General Assembly, Madison College became a coeducational institution.

In 1971, following the retirement of Dr. Miller, Dr. Ronald E. Carrier became the fourth president of the University. During his administration, six major University buildings have been constructed. Enrollment at the University has grown under Dr. Carrier’s administration from 4,000 to the 1976-77 enrollment of 7,700 (55 percent women and 45 percent men).

In 1977, the institution received the name James Madison University by action of the General Assembly, recognizing the great changes at the institution.

Location

James Madison University is located in Harrisonburg, an attractive city of 17,000 in the heart of the Shenandoah Valley of Virginia. The campus offers a view of the Blue Ridge Mountains to the east and the Alleghenies to the west.

Harrisonburg is at the intersection of three major highways: Interstate 81, U.S. 33 and U.S. 11. Interstate 81 and Interstate 64 intersect about 25 miles south of Harrisonburg.

The Greyhound Bus Lines has a terminal in Harrisonburg and Piedmont Airlines serves the Shenandoah Valley Airport, about 20 miles from the campus. Amtrak passenger train service and a Trailways Bus Lines terminal are available at nearby Staunton.
Organization

The general responsibility for the administration of the University has been assigned to the President who is appointed by the Board of Visitors. The Board has an Executive Committee which consists of three Visitors and the Rector, as an ex officio member. When the Board is in recess, the Executive Committee may exercise the power of the Board on all but major matters.

To assist the President in the administration of the University, the Board has authorized five vice presidential positions: Vice President for Academic Affairs; Vice President for Business Affairs; Vice President for Student Services; Vice President for Public Affairs; and Vice President for Administration. Appointments to these positions, to other administrative offices, and to the faculty and staff of the University are made by the Board upon the recommendation of the President.

The academic areas of the University are divided into the School of Arts and Sciences, the School of Education, the School of Business and the Graduate School. Deans, Department Heads, and individual faculty members are responsible to the Vice President for Academic Affairs in all matters pertaining to instruction.

Campus and Buildings

The James Madison University campus contains a total of 362 acres, including 31 acres at the University Farm about eight miles from the main campus. The main campus faces on Harrisonburg’s Main Street and extends in an eastward direction to Interstate 81.

Buildings on the western portion of the campus—“Front Campus”—are constructed of native blue limestone. Stone for the original University buildings was taken from the campus itself.

The newer buildings on the eastern portion of the campus—“Back Campus”—are constructed of red brick. All these buildings have been constructed in the last ten years.

Residence Halls are Spotswood, Cleveland, Converse, Gifford, Logan, Wayland, Hoffman, Huffman, Frederikson, Chappellear, Hanson, Weaver, Dingledine, Garber, Ikenberry, Shorts, Eagle, White and Chandler. New “cluster house” residence halls for 365 students are under construction adjacent to Newman Lake. They will be completed in 1978.

Chandler Hall serves as a resident hall but also serves as the center for the University’s alumni activities and as a “mini campus center,” augmenting the services of the Warren Campus Center.

Gibbons Dining Hall, designed to serve 1,700 people at one sitting, is located directly behind Wilson Hall at the center of the campus.
Madison Memorial Library contains the equivalent of 350,000 volumes in hardbound and microfilm form and adds a significant number of volumes each year. The book collection has been carefully selected to provide the books necessary to supplement the studies of all students and to permit students to read widely in subjects not covered by formal classes. The Library also houses the Department of Library Science and Educational Media.

Wilson Hall, the building at the head of the campus mall, is the central administration building. It contains the Office of the President and the major administrative offices. Wilson Hall includes an auditorium with a seating capacity of 1,372, and contains the Department of Elementary and Early Childhood Education and the Department of Secondary Education and School Administration.

Maury Hall contains faculty offices and classrooms. It is the oldest building on campus and contains the Department of Special Education, the Department of Military Science, the Child Study Center, and the Office of the Dean of the School of Education.

Keezell Hall accommodates the Department of Foreign Languages and Literatures, the Department of English and the Office of the Dean of the Graduate School.

Anthony-Seeger Campus School provides classrooms for nursery school, kindergarten and elementary grades. The Campus School is operated as a model school in the community and serves School of Education programs.

Duke Fine Arts Center houses the Music Department and the Art Department. It contains the Latimer-Shaeffer Theatre, which seats 344.

Harrison Hall houses the Department of Accounting and Finance, the Department of Management and Marketing and the Office of the Dean of the School of Business. The Department of Business Education and Office Administration is located in Harrison Hall Annex.

Jackson Hall houses the Department of History and Johnston Hall houses the Department of Sociology, Anthropology, and Social Work, and the Department of Psychology. Moody Hall houses facilities for the Home Economics Department and includes an auditorium-lecture room which seats 160.

Sheldon Hall houses the Department of Philosophy and Religion, the Department of Economics, and the Department of Speech Pathology and Audiology.

Alumnae Hall was built largely through contributions of the alumni and friends of the University. It contains offices relating to the Division of Student Affairs.

Introduction 17
Hillcrest is the home of the President of the College. It was built in 1910 by President Burruss and has been occupied by each of the University’s four presidents.

James Madison University Health Center contains modern medical facilities and is fully staffed by physicians and nurses.

Godwin Hall, a field house containing a 5,000-seat gymnasium and an olympic-size swimming pool with room for 800 spectators, houses the offices of the Physical and Health Education Department and the Intercollegiate Athletic Offices. Madison Stadium is adjacent to Godwin Hall and contains seating for approximately 10,000. The stadium contains a multi-purpose, artificial turf, recreational-athletic-intramural track and field. Other athletic facilities include a baseball field; a soccer field; and 15 tennis courts.

Warren Campus Center is the center for student activities on campus. It contains a bookstore, cafeteria, post office, recreational rooms and meeting rooms. An addition of the campus center, containing a movie theater and other facilities, will be opened in 1978.

Burruss Hall, adjacent to the library, houses the Department of Political Science and Geography, the Department of Mathematics, the Department of Biology, Radio Station WMRA-FM and the Office of the Dean of the School of Arts and Sciences.

Miller Hall, the University’s science complex, houses the Department of Chemistry, the Department of Geology, and the Department of Physics. The building also contains a spacious auditorium and a planetarium.

Zirkle House, across Main Street from Front Campus, houses the Department of Communication Arts.

Hoffman Hall houses the Department of Distributive Education.

The Alumni Association

The purpose of the Alumni Association is to keep the University in touch with its graduates; to acquaint them with its work, its plans, and its needs; to further their interests in all possible ways; and to promote warm fellowship among them by providing frequent reunions.

Alumni throughout the nation are active in support of the University. An annual fund drive is conducted to seek financial support of Alumni.

The Association keeps a directory of graduates of James Madison University, publishes “The Madisonian,” holds a special reunion every year in the fall, when all former students are invited to visit the University, and holds a Spring Alumni Day.
Purposes of Student Affairs

The Vice President for Student Affairs serves as the executive officer responsible for the development of a campus environment conducive to the positive educational and personal growth of students.

The purposes of the Division are:

1. To assist students as they participate in college governance, judicial affairs, and fraternal life; and to provide general information and referral services for other areas of student concern.

2. To meet the needs of diverse student population by programming a variety of activities and events. These should attract a significant number of students and encourage both the growth of the individual and the establishment of positive relationships among members of the University community.

3. To assist the members of the James Madison University community in the resolution of personal, vocational and educational concerns.

4. To assist residence hall and commuting students in the establishment of living-learning environments and educational experiences which make a maximum contribution to their intellectual, social and psychological growth.

5. To provide basic health care for students on a limited basis. Medical assistance includes out-patient services, short-term in-patient care and emergency treatment.

Thus, the Vice President and his staff members, working cooperatively with students, have developed diverse programs and services designed to meet the needs of the individual student as well as those of the University community.

General Information and Assistance

The Office of Student Affairs provides general information and assistance to students, including advisement regarding their rights and responsibilities. Referrals are made to professional staff members within the Division of Student Affairs and, when appropriate, to other University or community agencies.

The Office of Student Affairs is also responsible for maintaining student personnel files and implementing projects designed to meet emerging student needs or concerns.
Ombudsman

The President of the University has empowered the Associate Director of Student Affairs to serve as Ombudsman. In this role, the Associate Director may bypass normal administrative procedures while seeking direct solutions to students' problems.

Withdrawal Assistance

The Associate Director of Student Affairs interviews and advises any student who is considering withdrawal from the University. Together, the student and Associate Director discuss the personal, financial, and academic implications of withdrawal. The Office of the Associate Director also provides students with the required withdrawal request forms and assists in their completion.

Student Rights, Regulations, and Judicial Procedures

In order that the University can maintain an environment necessary to fulfill its stated purpose, certain regulations and policies have been established. Students are responsible for familiarizing themselves with University policies and regulations which are published in the student handbook. This document is distributed during the Fall registration or can be obtained from the Office of Student Affairs in Alumnae Hall.

Students who are charged with violations of the stated University policies are guaranteed their rights as members of the University community. The observance of due process is a prime consideration in all college judicial proceedings. All policies and regulations are classified as either major or minor. Minor violations are heard by the Life-Style Judicial Boards or the University Hearing Officer, while all major violations are heard by the University Judicial Council or the Appellate Hearing Officer. Violations involving academic dishonesty are heard by the Honor Council, which is an integral part of the University’s judicial structure. Students participate as members of all judicial bodies. Details of the procedures and areas of responsibility of these bodies as well as student rights and responsibilities are published in the student handbook.

The final authority to suspend or dismiss students is vested in the President of the University. Recommendations of suspension or dismissal by the University Judicial Council are submitted to the President. He may suspend or dismiss students for serious violations of University policies after due consideration by the University Judicial Council, or, in an emergency situation, if a student presents a clear and present danger to the continued operation of the University or to the safety of the members of the University community.
Student Government

Students, faculty, and administrators share the responsibility for the governance of James Madison University. They are represented on the University Council and on its commissions as well as on the standing and special committees reporting to these bodies.

The student population of the University community is collectively represented by an official organization known as the Student Government Association. The Association exists to promote the welfare of the students and to coordinate activities relevant to students and the campus community.

Residence Halls

Because the University is primarily a residential institution, residence hall living plays a significant role in the total educational experience of its students. The Office of Residence Halls and Commuting Student Services is committed to the goal of providing housing for students which is compatible with their individual lifestyles and values and which offers a community environment affording each resident maximum opportunities for educational and personal growth.

The Office of Residence Halls is responsible for management of all college residence halls and apartments including administration of contracts and room assignments, selection, training, and supervision of the residence hall staff, and the development of policies and procedures necessary for hall operation and management. The campus has been divided into three geographically distinct areas with a professional staff member, known as an Assistant Director of Residence Halls, supervising each area. Within each area, graduate and undergraduate Head Resident and Resident Advisors manage day-to-day hall operation and provide assistance to residents through social and educational programming, individual counseling, and referral to appropriate people or offices when residents need information or assistance.

The Office of Residence Halls offers seven different “lifestyle” options within university operated housing so that students may choose a living environment and social regulations which are most compatible with their personal lifestyles and value systems. A strong effort is made to comply with student preferences for lifestyle choices and room assignments. Questions regarding room assignments, housing contracts, and lifestyle choices should be directed to the Assistant Director for Residential and Commuting Student Services at the Office of Residence Halls in Alumnae Hall.

Off-Campus Housing and Commuting Student Services

Students interested in obtaining information about off-campus housing available in the Harrisonburg area should contact the Office of

Student Affairs 21
Residence Halls and Commuting Student Services, Room 101, Alumnae Hall. Questions relating to lease difficulties, landlord relationships, parking and transportation, or other concerns may be referred to the Assistant Director for Commuting Student Services also located in Room 101.

Student Health

The University Health Center is headed by the Director of Health Services. The medical staff includes physicians who specialize in orthopedics, general surgery, gynecology, and psychiatry. Registered nurses are on duty 24 hours daily to receive students and assist the physicians. Out-patient service, care for minor illnesses, and emergency care for all injuries and illnesses are provided. Short-term in-patient care is provided in case of minor illness.

The Student Health Service places emphasis upon general medical advice to students and upon the prevention and treatment of incipient and early illness. The chief emphasis of the Health Center is upon the care of students with minor illnesses which do not require hospitalization.

A medical history and a report of a medical examination must be submitted on forms provided by the University. A report of a medical examination, recorded on forms provided by the University, is also required when the student begins his third year of attendance.

Counseling Center

Counseling Center services are available to all undergraduate and graduate students, faculty and staff and their immediate families seeking confidential help in the clarification and resolution of personal, vocational or educational problems which may interfere with a successful college or life experience. The Counseling Center is located on the second floor of Alumnae Hall and its services are available without charge.

The Center is staffed by psychologists and a Study Skills Coordinator. Their primary responsibility is to provide professional assistance in an atmosphere which enables a person to make his/her own decisions and choices and assures his/her right to self-determination. Depending upon the nature of the problem, individual or small group counseling may be provided. A close professional relationship is maintained between the Counseling Center staff and the University Psychiatrist.

The Counseling Center also provides consultation services for faculty, administrators, students and parents. Consultation consists of advising individuals or groups on ways to increase personal and interpersonal effectiveness.
Some of the concerns which students often wish to discuss are: major fields of study and vocations, relationships with others, personal growth, marriage, study habits and attitudes.

Although psychological tests are not routinely administered, they may be used as a part of the assessment of the individual student's needs and goals. Tests of intelligence, aptitude, achievement, personality, interest and study skills are given when appropriate.

Regardless of the type of problem presented, all information with respect to the individual's relationship to the Counseling Center is completely private and confidential. The Madison community is welcome to visit or call the Counseling Center. Every effort is made to see an individual as soon as possible. The Center is open from 8:00 a.m.-5:00 p.m., Monday through Friday, with walk-in service (no appointment necessary) available Monday through Friday from 3:00-5:00 p.m.

Student Activities

The University offers excellent opportunities for active and stimulating social and cultural life to all students. Varied programs are provided by the Campus Program Board, honor societies and other recognized student clubs and organizations. The Student Activities Office assists college groups in arranging events and gives guidance to the development of campus organizations.

The Warren Campus Center serves as a focal point for resident and commuting students. Its facilities include lounges, study areas, snack bar, meeting rooms, and offices of campus organizations.

The University Post Office, Bank and Bookstore are also located in the Campus Center. In addition, there are recreation areas which include the Outing Center, Craft Center and Game Room.

The Campus Program Board arranges activities to develop the individual, broaden his/her interests, stimulate creativity, encourage display of talent and stress leadership and group interaction. These typically include charter trips to cultural and athletic events, movies, coffeehouses, concerts, dances and exhibits.

There is a varied schedule of concerts, plays, recitals and lectures presented by prominent artists as well as students and faculty members. James Madison University participates in the University Center in Virginia. Through the Center's Visiting Scholars program, outstanding academic personalities are brought to the campus.

The JMU Farm, a farmhouse on the Shenandoah River, is available for picnics and outings.

Chapters of eight social sororities (Alpha Gamma Delta, Alpha Sigma Alpha, Alpha Sigma Tau, Kappa Delta, Phi Mu, Sigma Kappa, Sig-
ma Sigma Sigma, and Zeta Tau Alpha) operate under the general control of the university administration and local Panhellenic Council. All are members of the National Panhellenic Conference.

James Madison University has eight social fraternities on its campus (Theta Chi, Alpha Chi Rho, Sigma Phi Epsilon, Tau Kappa Epsilon, Sigma Nu, Sigma Pi, Kappa Sigma and Pi Kappa). These organizations are members of the Inter-fraternity Council and operate under the jurisdiction of the university administration.

James Madison University has one national service sorority, Delta Sigma Theta, which is a member of the national Panhellenic Council, one national service fraternity, Alpha Phi Omega, and an international service club, Circle K.

Many honorary societies, devoted to encouraging high standards of scholarship, leadership, and professional competence, maintain active chapters on the campus. James Madison University has one national honor society, Phi Kappa Phi, which recognizes and encourages superior scholarship in all fields of study. The National Honor Society of Phi Kappa Phi is a founding member of the Association of College Honor Societies. The University has chapters of Mortar Board and Omicron Delta Kappa, national leadership honor societies for university students. In addition, most departments and subject matter areas sponsor local clubs to provide majors and other interested students with experiences and activities not always available in the classroom. Detailed information concerning these organizations, including requirements for membership, purposes, and specific activities, can be obtained from the sponsoring departments, the Office of Student Affairs, or the Student Government Association Handbook.

OTHER STUDENT SERVICES

Career Planning and Placement

The Office of Career Planning and Placement, located on the second floor of Alumnae Hall, is designed to serve students at various stages of the career exploration and job search process. Professional career counselors are available to discuss vocational objectives relating to the educational background and experiences of the individual student.

A multi-purpose career reference library contains information on career planning and choice, occupational areas, manpower trends, employer literature and directories, and other placement related resource material.

A continuous campus recruiting program by employers from public schools, business, industry, and government agencies is carried out
from October through May of each year. Numerous career oriented workshops and presentations, including a university-wide career day program, are held periodically.

Students approaching their senior year are encouraged to register with the office by filling out a placement file. This allows students and alumni to participate in the on-campus interview program and establishes credentials to be sent to prospective employers upon request. Placement files are retained in the office for five years from the registrant’s date of graduation or five years from the last date of active use.

All services are intended to supplement the efforts of students as they develop their own career alternatives and do not replace the student’s own personal search for employment. Good career planning and exploration, along with the professional job search assistance the office can supply, aids greatly in increasing the student’s chances for finding satisfying employment.

Student Recreation

The following facilities for recreation are available to students by presenting their I.D. cards to the recreation supervisor on duty: Sinclair Gymnasium, Savage Natatorium, handball and squash courts, conditioning room (all located in Godwin Hall), Keezell pool, tennis courts, and athletic fields (both natural and artificial turf adjacent to Godwin Hall). There is a comprehensive intramural program for both men and women.

Motor Vehicles

From 8 a.m. to 5 p.m., Monday through Friday, during the school session, parking on campus is limited to registered vehicles displaying a University parking decal. Physically handicapped, commuting students, resident seniors, resident juniors, and sophomores in good standing may register a vehicle in that order of priority on a space available basis. Other students with valid requests (in writing in advance) may be granted special permission to park on campus, provided space is available.

Additional information and/or changes in the above are contained in the Parking and Traffic Regulations booklet that will be available to everyone during the fall registration and may also be picked up at the Safety and Security Office.
Academic Information
ADMISSION

Admission to James Madison University is competitive. The enrollment for James Madison University is as authorized by the State Council of Higher Education for Virginia. The number of new and re-entry students admitted each year is limited by the available dormitory and classroom space, instructional personnel and budgetary considerations. All applications for admission will be examined in accordance with policies approved by the Board of Visitors. The University offers admission to those applicants who have performed well academically and on standardized examinations. In addition, consideration is given to those students who have potential to contribute to the diversity of the University community. Students are selected from a wide variety of interests, attitudes, and backgrounds. Applications for admission will be considered without regard to race, color, sex, age, or national origin of individuals. Students will be considered under the regular admission process beginning February 1.

Initial admission to the University does not assure continued attendance at succeeding sessions. Students enrolled at the University who wish to attend the following academic year must apply for re-admission prior to the beginning of the regular session term. Application forms for enrolled students will be mailed to regular students and must be completed and submitted to the Business Office prior to April 1. After the initial mailing, re-admission forms must be obtained from the Office of Admissions.

Honors Admission

The University will offer "Honors Admission" to highly qualified freshman applicants with exceptional rank in class and SAT scores. These applications will be reviewed on receipt of the required credentials. Notification of acceptance for the "Honors Admission" students will be on a continual basis until February 1. Students not selected under this plan will be considered under the regular admission process beginning February 1. Consideration of applications received after February 1, will be contingent upon available residence hall and classroom space.

Interviews

Although an interview is not required for admission to the University, prospective students are invited to attend group interviews and to participate in group tours of the campus.

Students desiring to attend these group interviews should make an appointment with the Director of Admissions or his representative.

Group interviews are held each weekday at 10:00 a.m. and 2:00 p.m. and at 9:00 a.m. and 10:30 a.m. on Saturday. Guided tours of the
campus are conducted at 1:00 p.m. during the week and at 9:45 a.m. on Saturday mornings. Tours are not conducted during the Thanksgiving, Christmas, and spring vacation periods.

The Office of Admissions is located in Varner House and parking space for visitors to the University is located adjacent to the building.

FRESHMAN STUDENTS

Admission Requirements

The general requirements for admission to James Madison University are:

1. graduation from an accredited secondary school or its equivalent as shown by examination;
2. rank in the upper one-half of the graduating class;
3. an acceptable score on the Scholastic Aptitude Test of the College Entrance Examination Board (morning session);
4. satisfactory health certification; and
5. recommendation for admission by the high school principal, head-master, or authorized representative.

These requirements provide information to be used by the Office of Admissions in acting upon applications. Each applicant is considered on an individual basis.

Scholastic Preparation

James Madison University stresses sound preparation in the academic disciplines.

The following is a minimum program of studies for students planning to enter James Madison University: 4 units in English, 2 units in History and Government, 1 unit in a Laboratory Science (Biology, Chemistry or Physics), and 2 units in Mathematics (including Algebra I, II, or Geometry). In addition to the minimum requirements, all students majoring in a Bachelor of Arts Degree program must have two years of Foreign Language.

Preference will be given to those applicants whose records exceed the above minimum units.

Application Procedures

Applications for admission to James Madison University should be submitted early in the first semester of the high school senior year. Consideration of applications for the fall semester received after February 1 will be contingent upon available residence hall and classroom space.
The first step in the admissions procedure is to request the application form for Undergraduate Admission. This form should be carefully completed, properly signed and submitted to the secondary school Guidance Counselor or Principal with the application fee of $15.00. This application fee is required of all applicants. It Must Be By Check Or Money Order. It is not refundable or transferable and it will not be credited to the student’s account. The applicant should request that the Counselor or Principal complete the application or attach a copy of the applicant’s transcript and forward the application and fee to the Director of Admissions, James Madison University, Harrisonburg, Virginia 22801.

In addition to the completed application form and the official high school transcript, the College Entrance Examination Board test scores (Scholastic Aptitude Test) must be submitted. The applicant will be notified of the decision by the Office of Admissions.

In order to secure a room reservation, a fee of $100 is required of all dormitory applicants accepted for admission. This fee is due on or before May 1. Residence Hall space is assigned by date of receipt of the room reservation fee. Therefore, accepted applicants are urged to submit the room reservation fee as soon as possible after being offered admission. It will be credited to the student’s account upon registration. If payment of this fee is not made on or before the due date, the acceptance will be withdrawn and the application will be placed in the inactive file.

A medical history and a report of a medical examination must be submitted by all applicants, (enrolling for seven or more credit hours) on forms provided by the University in order to meet the final admission requirements. A student will not be permitted to complete registration until a satisfactory report of a medical examination has been submitted. An applicant must be in good health—free from any communicable disease, and physically and mentally capable of performing the usual duties required by the University program. Any student who withholds pertinent health or other personal information may be required to withdraw from the University.

College Board Examinations

All freshman applicants for admission to James Madison University are required to take the Scholastic Aptitude Test given by the College Entrance Examination Board and to have the results submitted to the Director of Admissions by the College Entrance Examination Board.

The Scholastic Aptitude Test is given in November, December, January, March, May, and June. Students are encouraged to take the test during the Spring of their junior year. Seniors, however, should
take the test in November or December. Information concerning this test program may be obtained from the high school principals and guidance directors, or from the booklet entitled, *Bulletin of Information, Scholastic Aptitude Test*, which may be obtained free by writing to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. The booklet, *A Description of the College Board Scholastic Aptitude Test*, may also be procured by request from the above address.

Achievement tests in individual subjects are not required for admission to the University.

**NON-TRADITIONAL ACADEMIC CREDIT**

**Advanced Placement**

In certain subjects, applicants for admission who have completed advanced work in secondary school may apply for advanced credit at James Madison University. Each case will be considered individually on its merits. James Madison University has made arrangements with the College Entrance Examination Board to participate in the Advanced Placement Program offered by that organization.

Students may apply to the College Entrance Examination Board for permission to take one or more of the tests. The Advanced Placement Tests are administered in May. It is suggested that interested students discuss this matter with their guidance counselors or principals. The Board reports the results of the examinations to the University. After consideration of the report, the Office of Admissions will make the decision regarding advanced standing credit.

Advanced Placement College Board Examinations are available in the following subjects: English, Music, Mathematics, French Language, Biology, French Literature, American History, German Literature, Physics, European History, History of Art, Spanish Literature, and Chemistry.

The address of the College Advanced Placement Examination Board is Box 977, Princeton, New Jersey, 08540.

**College Level Examination Program (CLEP)**

James Madison University participates in the College Level Examination Program (CLEP). CLEP is a national program of credit-by-examination that offers a student an opportunity to obtain recognition for college level achievement. The following policies determine the awarding of advanced standing credit related to this program.

1. The minimum score on the subject examinations shall be the score that is equivalent to the mean score achieved by students
in the national norms sample who earned a grade of C in a regular college course in the subject.

2. The minimum score on the general examinations shall be the 47th percentile.

3. The duplication of credit in the general and subject examinations will not be permitted, nor will duplication in CLEP examinations and previous formal course work be permitted except for courses previously taken in a non-college parallel program.

4. If an equivalent course is not offered, CLEP will be accepted as elective credit whenever a similar discipline or department is available at the University.

5. Academic departments may require other evidence of proficiency.

6. Residency and other degree requirements of James Madison University must be met (see page 54).

The Office of Admissions will coordinate the determination and awarding of CLEP credit. Additional information may be obtained by contacting the Admissions Office.

The Counseling Center on the James Madison University Campus will administer the CLEP examinations on a monthly basis. Interested individuals may write to the Counseling Center for a schedule of dates the test will be given.

A request for a Bulletin of Information for Candidates should be directed to: College Level Examination Program, Box 592, Princeton, N.J. 08540.

TRANSFER STUDENTS

A transfer student who has completed one full academic year of college work, at the time of application, may omit sending the secondary school record and SAT scores. Applicants who have completed less than one academic year of college work must submit the secondary school record and SAT scores in addition to college transcripts. Transfer students must request that a copy of official transcripts of grades be sent by each college or university previously attended. Concealment of previous attendance at a college or university is cause for cancellation or rejection. Consideration of applications received after February 1 will be contingent upon available space.

Admission Requirements

A student who wishes to transfer to James Madison University must meet the following requirements:
1. Have honorable separation from previous institution(s). It is the student’s responsibility to provide the Director of Admissions at James Madison University with official transcripts of work completed from all colleges attended. Concealment of previous attendance at a college or university is cause for cancellation of admission and registration.

2. Be eligible to continue or to be readmitted at the last institution attended unless all work has been completed or the student has graduated from that institution.

3. Must have earned an above average cumulative grade point average in a college parallel program or have earned the Associate Degree in a college parallel curriculum.

Applicants in the Associate in Applied Science Degree program will be considered upon an individual, applicable basis. Each course will be evaluated and credit will be allowed only for the college parallel courses where the qualifications of the applicant are acceptable for admission.

Application Procedures

1. Complete and return the application for Undergraduate Admissions along with the application fee of $15.00 to the Director of Admissions, James Madison University, Harrisonburg, Virginia 22801. This fee is not refundable or transferable and will not be credited to the student’s account. The application fee must be paid by check or money order.

2. Request all colleges attended to send the Director of Admissions at James Madison University official transcripts of college records including a statement of honorable separation from that institution. Concealment of previous attendance at a college or university is cause for cancellation of admission and registration.

3. Submit a medical history and a report of a medical examination on the forms provided by the University. The medical forms will be mailed to the applicant with the letter of acceptance.

Evaluation of Transfer Credits

Credit will be allowed for those courses in which the student has made a grade of “C” or better and which are equivalent to courses offered at James Madison University.

After the student has been approved for admission, the Office of Admissions will evaluate the transcript of each transfer student to show the credits accepted by the University. The Head of the Depart-
ment in which the student is majoring will determine the credits required for graduation within the department.

Residency and other degree requirements of James Madison University must be met.

Not more than twenty-five per cent of the work toward any degree may be done through extension. Such work must be relevant to the degree for which the student is enrolled. Students should secure approval from the Director of Records at James Madison University in the choice of such courses.

READMISSION

A student who has withdrawn from James Madison University for one semester or longer must reapply for readmission through the Office of Admissions. Applicants for re-entry to the Spring term should apply early in the Fall; applicants for the Fall semester should apply by February 1.

If the student has attended another institution since leaving James Madison University, the work there as well as that done at the University will be taken into consideration.

When a student withdraws during a semester and plans to return the next academic year, he/she must submit an application for readmission and a $15.00 non-refundable application fee to the Director of Admissions.

A student who is placed on academic suspension may apply for readmission after one calendar year. His/her record must be reviewed by the Retention Review Committee before readmission will be considered.

A student who re-enters the University after an absence of a semester or more returns under the current catalog or the catalog of his/her graduating class.

FOREIGN STUDENTS

Foreign students must satisfy all general admission requirements. In addition, the foreign student must present satisfactory TOEFL scores and a statement of financial sufficiency.

ADMISSION OF VETERANS AND SPECIAL STUDENTS

James Madison University encourages veterans and other adults to apply for admission as full or part-time students.
Service Credit

Veterans who have one year or more of active military duty will be granted six semester hours of Health and Physical Education credit (providing they have no previous credit in this area). This credit will permit students to exempt physical education requirements; however, those students in a teaching curriculum must complete Hth. 370 for certification purposes.

Additional credit may be given for successful completion of certain service schools. This credit will be determined on the basis of recommendations in A Guide to the Evaluation of Educational Experiences in the Armed Services. The Admissions Office should be consulted.

Credit is allowed for Defense Language Institute and the amount of credit varies with the type of course successfully completed. An official transcript must be received, and the credit allowed is based on the recommendation in The Guide to the Evaluation of Experiences in the Armed Services. For those languages not offered at James Madison University, a maximum of twelve hours is accepted.

Special Students

A student enrolled for credit courses but who is not presently seeking a degree is classified as a special student. This applies to those students who wish to enroll for day or evening classes. An application and $10.00 fee for admission with supporting credentials must be filed with the Director of Admissions. The application fee continues in effect as long as the student remains a special student.

Special students will be required to submit a $15.00 application fee when they file an application to become a regular, degree-seeking student. However, not more than one such fee will be required during the same session.

Admission of High School Students as Special Students

High school students who have completed their junior year may be admitted to James Madison University as Special Students. The students must be recommended for this program by the high school principal or guidance counselor and may enroll in classes in the Summer Term preceding their senior year and/or during their senior year.

Students admitted to this program may enroll for up to two courses during the Summer Term and for one course each term while attending high school classes.

High School students seeking admission to James Madison University under this program must submit the "Application of Admission as
a Special Undergraduate Student," a recommendation from the high school principal or guidance counselor, a transcript of high school grades, and a $10.00 initial application fee.

Applications must be approved by both the Admissions Office and the Dean of the School in which the student desires admittance. If admission is denied, the $10.00 application fee will be refunded. Should the student enroll as a full-time student at James Madison University following high school graduation, credits earned, where appropriate, will apply toward degree requirements following the completion of one term. Transfer of these credits to other colleges would be at the discretion of the school concerned.

The high school student admitted as a Special Student will be notified of his/her registration procedure by the Admissions Office.

James Madison University will also award advanced standing credit to high school senior students who complete equivalent courses at other accredited institutions of higher learning.

Admission for Post-Baccalaureate Study

A graduate of an accredited institution taking a limited number of courses and not presently working toward a degree at James Madison University may be admitted as a post-baccalaureate student by having his/her college or university furnish a statement of degree and date earned.

Admission for Term Special Students

A regularly enrolled student of another accredited institution who wishes to take a limited number of hours at James Madison University during a term may be admitted as a term special student by having the registrar of his/her college or university send a statement of good standing and current classification.

Admission for Adult Special Students

General Policy

1. An undergraduate student may enter James Madison University as an Adult Special student and enroll in up to 11 semester hours per semester for college credit without qualifying credentials under the following conditions:

a. If he/she has a high school diploma or equivalent, and

b. If he/she has had an interruption of at least one year in his/her formal education and is (1) 21 years of age or (2) 18 years of age or older and employed full time while in attendance at James Madison University.
2. An individual who has been academically dismissed from another institution because of low academic standing, or who has been denied regular admission to James Madison University because of low admissions qualifications, shall be required to wait for a period of at least one calendar year for admission as an Adult Special student.

Admission to Degree Program

1. A student entering initially as an Adult Special student may be admitted to degree candidacy upon:
   a. The completion of 9 credit hours with a minimum of a 3.00 quality point average, or 15 or more credit hours with a minimum of a 2.00 quality point average, and
   b. The approval of the Office of Admissions.

2. Thirty semester hours is the maximum that can be earned under this program. An Adult Special student must apply for admission to degree candidacy after 30 semester hours of study. Admission will be determined in part by his/her having earned the satisfactory quality point average as specified above, and by having met any specific requirements of the department he/she chooses to enter.

3. All credits earned as an Adult Special student will be reviewed upon matriculation and may be applied toward the degree program if appropriate.

SENIOR CITIZENS

Eligible senior citizens, age 62 or over, who are legal residents of the State of Virginia may enroll as special students for credit or non-credit courses without paying tuition or other applicable fees. Additional information may be obtained from the Office of Admissions.

AUDIT STUDENTS

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Office of Admissions and the department chairman involved. Fees for audits will be assessed on the same basis as fees for credit courses.

GRADUATE STUDY

Any student who holds a Bachelor's Degree from an accredited institution of higher education and who wishes to pursue courses for graduate degree purposes should contact the Graduate School.
THE UNDERGRADUATE PROGRAM

The Vice President for Academic Affairs serves as the executive officer in all matters of academic status. All proposed exceptional programs of study and exceptions to degree requirements must be presented to the Vice President for Academic Affairs through the faculty advisor and department head for his consideration and approval. He also makes the decisions concerning all questions about the evaluation of credits which involve policy.

DEGREES

James Madison University offers programs leading to seven baccalaureate degrees: Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Music Education (B.M.Ed.), Bachelor of Business Administration (B.B.A.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.M.), and Bachelor of Social Work (B.S.W.).

The program of study leading to the Bachelor of Arts includes 43 semester hours in General Studies, and in addition, 3 semester hours in Philosophy, 6 to 14 semester hours of a Foreign Language*, and a departmental major consisting of an intensive concentration in one subject or in one area of knowledge. A minimum of 128 semester hours is required for graduation. Departments offering major programs leading to the Bachelor of Arts are Art, Biology, Chemistry, Communication Arts, Economics, English, Foreign Languages and Literatures, Geology, History, Library Science and Educational Media, Mathematics, Philosophy and Religion, Physics, Political Science and Geography, Psychology, and Sociology, Anthropology and Social Work.

The program of study leading to the Bachelor of Science includes 43 semester hours of General Studies, and in addition, 3 semester hours in Mathematics, 4 semester hours in Natural Science or 3 semester hours in Social Science, and a departmental major consisting of an intensive concentration in one subject or in one area of knowledge. A minimum of 128 semester hours is required for graduation. Departments offering major programs leading to the Bachelor of Science are Art, Biology, Business Education and Office Administration, Chemistry, Communication Arts, Distributive Education, Early Childhood and Elementary Education, Geology, Home Economics, Library Science and Educational Media, Mathematics, Physical and Health Education, Physics, Political Science and Geography, Psychology, Sociolo-

*A student must complete the intermediate level of a foreign language. The language requirement may be satisfied by an Exemption Test.
gy, Anthropology and Social Work, Special Education and Speech Pathology and Audiology.

The program of study leading to the Bachelor of Music degree includes 43 semester hours in General Studies, a 27 semester-hour core program, and options for concentrations in Voice, Piano, Organ, Instrumental, and Theory and Composition. The minimum number of hours varies with the concentration from 128 to 130 hours, exclusive of ensemble participation.

The program of study leading to the Bachelor of Music Education degree includes 43 semester hours in General Studies, a 27 semester-hour core program, and options for concentration in either vocal or instrumental music. The minimum number of hours, which includes all requirements for the Collegiate Professional Certificate, is 132 for those in a vocal concentration and 134 for those in an instrumental concentration, exclusive of ensemble participation.

The program of study leading to the Bachelor of Business Administration degree includes, in addition to the 43 hour General Studies requirement, a 36 semester-hour core program and options for majors in the following areas: Accounting, Management, Marketing, and Management Information Systems.

The program leading to the Bachelor of Fine Arts degree includes 43 hours in General Studies, a 30 semester-hour core program, 9 semester hours of art electives, and 18 semester hours in a concentration chosen from one of the following areas: Painting and Graphics, Crafts, Design, and Sculpture.

The program of study leading to the Bachelor of Social Work includes 43 semester hours in General Studies, and in addition, a 39 semester hour core program in Social Work plus 9 semester hours of approved electives.

GENERAL STUDIES

Purposes of the General Studies Program

James Madison University offers a program of education based on the liberal arts and sciences tradition, which is fundamental to the pursuit of knowledge and is the hallmark of an educated person. The purpose of the General Studies program is to help the student achieve a greater breadth of learning and a deeper understanding of the human experience. In keeping with these aims each undergraduate can plan a program, tailored to his/her needs, which enriches his/her life and provides a foundation for later specialization.
In more specific terms, the General Studies program at James Madison University attempts to accomplish the following objectives.

1. To enable the student to acquire greater breadth of knowledge on which to build the more specialized knowledge of the student’s major, minor, and/or elective areas of study.

2. To enable the student to acquire a deeper understanding of the human experience by
   —developing understanding and responsiveness to the arts and humanities
   —developing awareness and understanding of the scientific world in which the individual lives
   —developing understanding of the worth of each individual and his/her relationship to society.

3. To enable the student to develop the fundamental abilities of analyzing problems, communicating effectively, and understanding past human experience which enriches the present.

**GENERAL STUDIES PROGRAM**

**Group I.** 14 Semester Hours

a. English 101-102 ........................................ 6 hours
b. Mathematics ........................................ 3 hours
   Any 100 or 200 level 3-credit Mathematics course
c. Oral Communications .................................. 3 hours
   Comm. 200, 222, or 226
d. Physical Education ..................................... 2 hours
   Any P.E. activity course

**Group II.**

a. Fine Arts ........................................ 3 hours
   One course selected from Art 200, 201; Comm. 250 (Theatre); Mus. 200, 201; or P.E. 349 (Dance)
b. Humanities ........................................ 6 hours
   Two courses selected from the following:
   English—any 200 level course
   Foreign Languages (French, German, Greek, Latin, Russian, Spanish) any literature course
   Humanities—any 100 or 200 level course
   Philosophy—any 100 or 200 level course
   Religion—any 100 or 200 level course
c. History ........................................ 6 hours
   Two courses selected from any 100 or 200 level History course with at least one of the courses in a non-US area
d. Natural Science .................................................. 8 hours
   Two courses selected from the following:
   Bio. 100, 105, 120, or 130
   Chemistry—an any 100 level course
   Geol. 100, 130, or 211
   Phys. 109, 130, 135, 220, 231-232

e. Social Science .................................................. 6 hours
   Two courses selected from the following:
   Anthropology—an any 100 or 200 level course
   Econ. 120, 125, 130, 135
   Geog. 120, 210, 236, 280
   Hth. 270, 354
   HE. 133
   PoSc. 110, 210, 225, 230
   Psyc. 231-232, 233-234
   Sociology—an any 100 or 200 level course

CREDIT BY DEPARTMENTAL EXAMINATION

Examination for credit in courses offered by the University may be offered to enrolled students who believe they have already mastered the material of the course through private study, technical employment, or the like. The following regulations govern the granting of credit by examination:

1. Enrolled students may make application to take examinations for credit in most courses in the undergraduate curricula. The students should be certain they have the minimal preparation and background before seeing the Head of the Department in which they are applying for examination.

2. Examinations may not be given to students in sequential courses numbered lower than those the student has already completed.

3. Permission to take an examination for credit must be obtained from the instructor and the Head of the Department in which credit is sought.

4. Each department will use its own discretion in developing the form of the examination and its administration.

5. Students may earn as much as 30 semester hours through departmental credit by examinations, with no more than 12 semester hours in one area.

6. To receive credit the student must make at least a grade of “C” on the examination.
7. The examination for each course can be taken only once in a given semester.

8. A fee is charged for the administration of an examination for credit. (See Financial Information Section.)

ORIENTATION AND ACADEMIC ADVISING

An Orientation Program for all new freshmen and transfer students is held during the Summer Session for students entering in the fall, and again immediately prior to spring registration for new students entering in the second semester. Students accepted to James Madison University for the fall semester are invited to attend one of the orientation programs conducted during the summer. The primary purpose of the two-day sessions is to acquaint the student with the social and academic life at James Madison University.

At each session, the President of the university, or his representative, will welcome the incoming students. Student Affairs personnel will introduce the student to campus life and the student’s rights and responsibilities as a member of the university community. The program will cover such topics as student activities, organizations and government, resources such as the medical and counseling services, and residence hall living.

All new students will be assigned to academic advisors who will discuss with them the University’s academic policies and procedures, the various programs of study, advanced placement and exemption testing, and registration procedures. The students will also plan with their advisors their schedules of classes for the fall semester. Freshman students will remain with these advisors until the early part of the second semester at which time they will be assigned to departmental advisors in their major field of study.

While orientation is a program designed primarily to assist students in their initial contact with college life, academic advising is an on-going relationship with students that extends until they graduate. Shortly after the beginning of the spring semester freshman students are transferred from their summer advisors to permanent advisors in the departments in which they plan to major. The role of the faculty advisor is to assist and advise students in the attainment of their educational goals. The advisors do not control their advisees’ programs. James Madison University believes that the responsibility of fulfilling all requirements for graduation lies with the students; therefore, they should be familiar with these requirements as outlined for them in their college catalog.
The University provides professional staff for students who need assistance in improving basic academic skills which might be influencing their ability to do satisfactory work in their course assignments. Any student who wishes to take advantage of these services may do so. Students can also be referred to a Laboratory on a voluntary basis by any professor, academic advisor, or the Counseling Center. There is no charge for these services.

The Study Skills Laboratory: The Study Skills Lab provides an opportunity for the student to examine those study habits and attitudes that may be influencing his/her college life. The lab is well equipped and provides assistance in such areas as listening, note-taking, test-taking, reading and comprehension, writing skills, etc.

The Writing Laboratory: The University expects students to demonstrate a satisfactory level of proficiency in the writing of English. For those who show a marked deficiency in writing ability or English proficiency, the University has provided a Writing Lab to improve these skills.

The Reading Center: The Reading Center provides a Reading Improvement Program designed to help students build their reading efficiency. Students are tested and provided materials and equipment in accordance with their needs. The materials used are designed for independent study in the Center and are available free, although students may purchase the text if they desire.

REGISTRATION

The Schedule of Classes, published before the beginning of each semester, contains a detailed outline of the registration procedure. Students are urged to study these schedules carefully and to keep them available for immediate reference during the registration period and throughout the semester. All students are expected to register on the dates indicated in the calendar. Although registration is permitted after these dates, a late registration fee is charged, and there is no reduction in other fees.

In no case is credit allowed in any course for which the student is not duly registered. Registration is not complete until all fees for the semester have been paid.

SELECTION OF A MAJOR

Entering students in conference with their advisors may determine a major program of study. If they have not decided on a specific major they may register as "Undeclared." Students who have not decided on a major field of study are encouraged to discuss some of their interests
with their advisor, professors, Department Heads, and fellow students. The Counseling Center will provide career guidance and testing for those who request it.

CHANGING A MAJOR

Any student who desires at any time to change his/her major should secure a “Change in Major” form from the Records Office.

COURSE LOAD

In all programs the normal load per semester is 16 hours of credit. The number of actual class hours will vary according to the number of laboratory courses in the program. Any student, including incoming freshmen, may add to the normal load a course in applied music or physical education, up to a maximum of 18 credits, without securing special permission.

It is strongly recommended that a student on Academic Warning not register for more than 16 credit hours.

An undergraduate course load of at least 12 credit hours a semester is required for a student to live in a dormitory.

Students of sophomore, junior, and senior standing, if they have a cumulative average of “B” or better, may carry as many as 19 credits without special permission. Seniors who have a minimum average of “C” (2.00) and who need an additional course in order to meet graduation requirements may also take as many as 19 credit hours without special permission. When required, special permission may be obtained from the Dean of the School. A student on PROBATION may not take more than 12 semester hours of work.

Students who enroll in Educ. 480, Directed Teaching, are not permitted to enroll in additional courses during the eight-week period of full-time student teaching. The recommended semester course load is 15 semester hours for students who enroll in Educ. 480 on the semester plan. For any exception to this, the student should consult the Dean of the School of Education.

For the Summer Session, the number of hours that a student may take will be as follows: Four credits during the May Term, four credits for each Four-Week Term, ten credits for the Eight-Week Term. If an undergraduate student has a 3.00 or better at the time of registration, he/she may add two hours to the Four or Eight-Week Sessions. The overload must be approved before or at the time of registration by the Dean of the School in which the student is majoring. Any student taking 600 level courses will not be approved for an overload. The Dean's signature is required on either the “Program Card and Registration Receipt” form or the “Permit to Register.”
CLASSIFICATION

The classification of a student depends on the number of semester hours of credit he/she has received.

*Freshmen* are students with 28 or fewer semester hours of credit.

*Sophomores* are students with 29–59 semester hours of credit.

*Juniors* are students with 60–92 semester hours of credit.

*Seniors* are students with more than 92 semester hours of credit.

GRADING SYSTEM

The University keeps a complete record of each student's work and sends a grade report to the student's permanent address at the end of each session.

Mid-semester reports on courses in which a student is doing failing work are sent to each student and to his/her advisor. Mid-semester grades in all courses are sent to freshmen.

Academic achievement of a student in a specific course is expressed by letters as follows:

- **A**—Superior.
- **B**—Good.
- **C**—Average.
- **D**—Passing.
- **F**—Failure.
- **I**—Incomplete.

**Incomplete Grades.** The “I” symbol is used to indicate incomplete work in a given course and is awarded only when a student is unable to complete the course work because of illness or some other equally compelling reason. Courses in which a student receives a grade of “I” must be completed by the end of the next regular semester, or the grade is recorded permanently as “F.” Consideration may be given to special circumstances upon written request by the student to the Vice President for Academic Affairs through the professor who awarded the “I.”

GRADE APPEAL PROCEDURE

A student who wishes to appeal a grade or retain an “I” beyond one semester must follow the steps of this procedure in the order listed:

*Confer with the faculty member.* The student should state at this conference the reason or reasons he/she feels a change of grade is warranted. At this meeting the faculty member has the obligation to explain to the student the basis for determining the grade which
the student was awarded. If the faculty member does not feel that a change of grade is warranted, the student may appeal to the:

a. Head of the Department in which the course is offered.
b. Dean of the School in which the course is offered.
c. Vice President for Academic Affairs

At each level of appeal, there is the responsibility to confer with the faculty member who may be required to review the basis used in determining the grade which was awarded to the student.

Upon agreement to a grade change at any level of appeal, the faculty member initiates the change of grade.

ATTENDANCE

A student’s participation in the work of a course is clearly a precondition of his/her receiving credit in that course. Because of the wide variety of courses and teaching methods at James Madison University, the University recognizes that the nature of a student’s participation in the work of a course cannot be prescribed on a University-wide basis. For this reason classroom attendance is not a matter subject to regulation by the University. A student’s attendance in class and laboratory is rather a matter between him/her and the professor in that class or laboratory.

CREDIT/NO-CREDIT COURSE REGISTRATION

The Credit/No-Credit option has been established to encourage students to explore academic areas with which they are unfamiliar. It is also designed to allow students to select courses of interest to them which are outside of their major and minor fields of concentration, especially those of exceptional challenge, without jeopardizing their academic record. Furthermore, it may also be used in some cases to reduce academic pressures and competition for grades.

Students electing to take courses under this option should be selective in choosing which courses to take Credit/No-Credit. Graduate and professional schools as well as future employers may possibly view the use of non-traditional grading systems adversely. Students should consult their academic advisors for information concerning the inclusion of Credit/No-Credit course grades within their program.

1. A student is eligible to take a course on a Credit/No-Credit basis if he/she has completed at least 28 semester hours at James Madison University and has attained a 2.25 cumulative grade point average. A transfer student may take courses on the Credit/No-Credit option if he/she has completed 28 semes-
ter hours with at least 14 semester hours at the University. Note: A student is permitted to register for physical education activity courses on a Credit/No-Credit basis at any time, without regard to minimum hours completed or grade point average.

2. The following courses may not be taken Credit/No-Credit:
   a. Courses within major program.
   b. Courses within minor program.
   c. Courses listed by name and number in a major or minor program but offered outside the major and minor department.

   All other courses may be taken on the Credit/No-Credit option.

3. A total of up to 15 semester hours may be taken on a Credit/No-Credit basis with a maximum of 4 semester hours per semester or one course of more than 4 semester hours.

4. Students must declare at registration the course or courses they plan to take on a Credit/No-Credit basis.

5. All changes to and from the Credit/No-Credit option must be completed by the end of the first drop period.

6. Credit/No-Credit will apply only to final grades. All course work and quizzes will be graded as for other students in the course.

7. Students taking a course on a Credit/No-Credit basis will not be identified to the instructor until after final grades have been submitted.

8. Letter grades will be submitted by instructors to the Director of Records who will change all grades of "A" through "C" to "CR" (Credit) for those enrolled under the Credit/No-Credit option. The student will receive credit hours, but not quality points, for the work completed. Therefore, the grade of "CR" will not affect the student's cumulative grade point average.

9. A grade of "NC" (No-Credit) will be recorded for all grades of "D" and "F." The student will not receive credit hours or quality points for the grade of "NC." The fact that the course was attempted will remain on the transcript, but the grade will not affect the student's cumulative grade point average.

**COURSE ADJUSTMENT**

After a student has completed his/her class schedule and has registered, no classes may be dropped, no additions made, and no transfers to other sections made without the approval of his/her faculty advisor.
A fee of $5.00 is required for any adjustment made after the "no fee" schedule adjustment period as specified in the University Calendar. The $5.00 fee must be paid unless the change is necessitated by circumstances beyond the student’s control and the fee is waived by the Dean of Admissions and Records.

1. Withdrawal from a course:
   a. Up to the end of the tenth week of semester courses (sixth week for block courses) a student may withdraw from any course with the signature of only his/her advisor. A grade of "W" will be recorded regardless of the status of the student in the course at the time of withdrawal.
   b. Withdrawal after the end of the tenth week of classes (sixth week for block courses) is not usually permitted. In the event a request stems from illness or other severe hardship beyond the student’s control, a student may petition his/her advisor and the dean of the school in which he/she is majoring for permission to withdraw. If permission is granted, a grade of "W" will be recorded. Dropping a course without permission incurs the grade of "F."

2. Adding a course—A course being added requires the signature of the advisor, the Records Office, and the Treasurer’s Office. The last day to add is as specified in the University Calendar. A course added after the specified deadline must be approved by the Head of the Department in which the course is offered.

FINAL EXAMINATIONS

Students are expected to attend final examinations at their scheduled periods. With extenuating circumstances, however, faculty members may approve a student’s request for an exception. Students whose request for an exception is disapproved by a faculty member have the right to appeal to the Department Head, Academic Dean, or Vice President for Academic Affairs, in turn. No appeal will be favorably considered without prior consultation with the faculty member.

WITHDRAWAL FROM THE UNIVERSITY

A student withdraws from the university when enrollment is terminated before completing the semester or Summer Session period for which he/she registered. A student desiring to withdraw must have a conference with the Associate Director of Student Affairs and complete the withdrawal request form available in the Associate Director of Student Affairs’ Office. Students who are unsure about withdrawing are encouraged to talk to a member of the Counseling Center staff before initiating withdrawal procedures.
The Associate Director of Student Affairs, who must approve such requests, sets the official withdrawal date, and notifies other university offices of the action. *Strict compliance with this requirement is mandatory.* A student who withdraws *without* receiving official approval, will receive a grade of "F" for all courses in which he/she is enrolled. A student withdrawing with official approval will receive a grade of "W."

Students enrolled in an off-campus course may withdraw from the University by securing a "Request for Withdrawal" form from the Center Director or the Office of the Associate Director of Student Affairs. This form should be completed and returned to the Office of the Associate Director of Student Affairs, where the official withdrawal will be processed.

An adjustment in charges will be figured from the official date of withdrawal. No adjustment in charges will be made unless the withdrawal form is received in the Office of the Associate Director of Student Affairs within thirty days (30) after the student leaves the campus. Adjustments will not include nonrefundable fees or charges.

**QUALITY RATING SYSTEM**

Quality points are assigned per semester hour of credit as follows: A grade of "A" is assigned 4 quality points; "B," 3 quality points; "C," 2 quality points; and "D," 1 quality point. Thus, a grade of "B" in a course bearing 3 semester hours of credit would be assigned 9 quality points and a grade of "C" in that course, 6 quality points. A grade of "CR" carries no quality point designation, and the semester hours of "CR" credit earned are not used in determining a student's quality point average. An "I" grade carries no quality points.

The *quality credit average* is computed by dividing the number of quality points by the number of semester hours of credit. Thus, if a student takes 16 semester hours of work and earns 40 quality points, the quality credit average is 2.50. *Grades earned at other institutions are not used in computing the James Madison University quality credit average.*

A, B, C, D, and F grades earned at the University are used in computing the quality credit average. A student has the privilege of repeating a course in an attempt to improve the grade previously made. The grade earned the last time the course is taken is the grade that will be considered as the final grade and used in the computation of the grade point average.

To enroll in Educ. 360, 470, 480 (Directed Teaching), ElEd. 369 and SeEd. 370, or other junior or senior Education courses prerequisite to student teaching, a student must have a quality credit average of 2.00.
DEAN’S LIST

To qualify for the honor of being placed on the Dean’s List, a student must earn a scholarship index of 3.25 and carry a course load of at least 14 semester hours, 12 of which must be in addition to any courses taken on credit/no-credit or in departmental honors.

RETENTION POLICY

The retention policy defines the minimum scholarship requirement for good standing and permission to enroll in a subsequent semester or summer session.

<table>
<thead>
<tr>
<th>Sem. Hrs. Attempted</th>
<th>Academic Warning (Quality Point Deficiency)</th>
<th>Academic Probation (Quality Point Deficiency)</th>
<th>Academic Suspension (Quality Point Deficiency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–34</td>
<td>1–12</td>
<td>13–23</td>
<td>24 or more</td>
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<td>35–68</td>
<td>1–9</td>
<td>10–17</td>
<td>18 or more</td>
</tr>
<tr>
<td>69–102</td>
<td>1–6</td>
<td>7–11</td>
<td>12 or more</td>
</tr>
<tr>
<td>103</td>
<td></td>
<td>1–5</td>
<td>6 or more</td>
</tr>
</tbody>
</table>

1. Quality point deficiency is twice the number of semester hours attempted at James Madison University minus the number of quality points earned at the University.

2. A student is subject to suspension if fewer than 6 semester hours are passed in any semester.

3. If a student is on academic probation for two successive semesters, he/she is not eligible to return the following semester unless probation has been removed prior to the beginning of the semester.

4. A student who is placed on academic suspension may apply for readmission after one calendar year and must have his/her record reviewed before admission is granted.

5. Retention standards are the same for transfer students as any other student except that semester hours include all semester hours accepted for transfer credit.

Academic Status and Retention

Academic status for a student is denoted as follows:

1. Good Standing
2. Academic Warning
3. Academic Probation
4. Academic Suspension

50 Undergraduate Program
Good Standing

A student is in “Good Standing” if his/her cumulative quality point average is 2.00 or above.

Academic Warning

The status of “Academic Warning” indicates that a student has a cumulative grade point average of less than 2.00, but that his/her grade point deficiency is not sufficient to warrant his/her being placed on “Academic Probation.”

Academic Probation

1. A student on academic probation may not take more than 12 semester hours of work.
2. A student may not hold a major student government position while on academic probation.
3. A student on academic probation may not represent the University in athletics or performing arts.
4. A student on academic probation is expected to confer regularly with his/her academic advisor and is encouraged to participate in the Study Skills Laboratory.

Academic Suspension

A student who is placed on academic suspension may apply for readmission after one calendar year. However, if there are extenuating circumstances associated with his/her academic deficiency, the student may appeal to the Retention Review Committee for reinstatement the following semester. The appeal must be in writing and should be sent to Dean Fay J. Reubush, Secretary of the Committee.

ACADEMIC HONORS PROGRAMS

The Honors Programs at James Madison University are designed to fill a number of purposes. They are administered by the Committee on Academic Honors and seek to recognize scholastic achievement and to provide alternative study opportunities which fall outside the regular curriculum. These Programs consist of various types of study, briefly described as follows:

Freshman Honors Classes: The University offers Honors sections in a number of different departments including English, History and Mathematics. These and additional Honors sections will be listed in the James Madison University Schedule of Classes.
Interdisciplinary Honors: There are two kinds of interdisciplinary honors courses. They may be taken separately and in any order.

HON. 200, Interdisciplinary Seminar, 3 credits.
A seminar with readings drawn from recent and older classic writings in various academic disciplines. May be repeated up to 3 times as topics change.

HON. 300, Issues and Problems, 3 credits.
A seminar that spans Departmental and School orientations, focusing on contemporary issues and problems. May be repeated up to 3 times as topics change.

The specific titles of the current courses are listed in the University Schedule of Classes.

Departmental Honors: Departments offer eligible students a special opportunity in the senior year to pursue an independent research topic in his or her major field. Students are invited to apply through their Department Head, during their junior year.

Interested students are invited to obtain information about these Honors Programs from the Vice President for Academic Affairs.

GRADUATION WITH DISTINCTION

A degree with distinction is awarded in several departments to persons who successfully undertake a program of independent reading, studies, and an Honors thesis for 6 semester hours credit during the senior year. Applications to work for distinction are limited to juniors who have achieved at least a 3.25 average and, in addition, have given evidence of sufficient initiative, originality, and intellectual maturity to warrant expectation of distinction in the program.

Applications shall be made at the completion of the first semester of the junior year to the Honors Committee. Acceptance for participation is solely determined by this Committee which must also approve the individual program for each student and designate a faculty member to direct the study. The thesis is expected as the culmination of the program. Instructions for application for Honors may be obtained at the Office of the Vice President for Academic Affairs.

GRADUATION WITH HONORS

In order to be eligible for graduation with honors, the student must have been in residence two years or more at James Madison University and have completed a minimum of 60 semester hours of course work on campus. The student must have a cumulative average as given below on all course work, including that taken at any other college, and must maintain at least the minimum average required for Honors (3.25) in work at the University.
The average for determining Honors is computed at the end of the semester preceding the semester in which final graduation requirements are met. The following cumulative averages are required for Honors:

- *cum laude* 3.25–3.499
- *magna cum laude* 3.50–3.749
- *summa cum laude* 3.75 and above

**REGULATIONS REGARDING TRANSFER OF CREDIT FROM OTHER INSTITUTIONS**

A student wishing to earn credits at another institution, either in the summer or during a regular session, must obtain permission in advance from the Records Office. The Records Office will make the determination concerning the course and its application toward a James Madison University degree following consultation with the Head of the Department, if necessary. The student is responsible for having an official transcript mailed to the Admissions Office when the work has been completed.

**COMPUTING QUALITY POINT AVERAGES OF READMITTED STUDENTS**

Students who return to James Madison University after a separation of two calendar years and who maintain a 2.00 quality point average for twelve semester hours may be given the option of requesting a quality point status equivalent to that of transfer students admitted to the University.

The following regulations will govern this option:

1. The option must be exercised immediately upon completion of twelve semester hours following readmission.
2. Consultation with the Dean of the School in which the student is majoring is required.
3. All grades will remain a part of the transcript.
4. Eligible students will receive degree credit for only those courses for which grades of “C” or better were earned prior to readmission.
5. Quality points earned for any course completed prior to readmission will not count in determining the student’s new cumulative quality point average.
6. The option will be extended only once during the student’s enrollment at James Madison University.

Undergraduate Program 53
STUDY ABROAD

James Madison University offers a study abroad program during the summer session. Information regarding the program can be obtained from the Dean of the Summer Session.

The University will accept credits earned abroad at approved institutions, in general accordance with its policy of accepting transfer credits. Approval of proposed study programs must be obtained from the Head of the Department, the Dean of the School, and the Vice President for Academic Affairs. Students who plan to study abroad may wish to consult with Dr. Bijan Saadatmand, Psychology Department, Chairman of the Foreign Studies Committee, for information on these programs.

GRADUATION REQUIREMENTS

The faculty advisor and the department head make the official check on major and minor course requirements for graduation. The Records Office makes the final check on courses required for the final term, on total credits earned, General Studies program, degree requirements, cumulative grade point average earned at the University, as well as other University-wide requirements.

To receive a degree from James Madison University, a student must—

1. Meet the General Studies requirements;
2. Have a minimum of 128 credit hours;
3. Have a scholarship index of 2.00 or better;
4. Have a scholarship index of 2.00 or better in his/her major and minor subjects;
5. Meet the course requirements of one of the curricula leading to the degree for which he/she is a candidate;
6. Have spent a minimum of two semesters in residence at James Madison University, and have earned a minimum of 32 semester hours of credit during this term of residence;
7. Be a student at James Madison University during the semester in which the requirements for the degree are completed;
8. Have taken at least 60 semester hours at an accredited senior institution of higher education.

A student expecting to graduate at the end of any semester must file an “Application for a Degree” with the Director of Records as specified in the University Calendar.
Responsibility for meeting the requirements for graduation rests with the student.

Attendance at graduation is expected. If a student is unable to be present for the graduation exercises, he/she must notify the Director of Records at least twenty-one days before Commencement.

CHOICE OF CATALOG

The particular catalog under which a student meets degree requirements is determined by the following policies:

1. A freshman at James Madison University enters under the current catalog. Freshmen who enter in summer meet the catalog requirements for the class entering the following fall.

2. A transfer student may elect one of two catalogs:
   a. The current one.
   b. The catalog that most of the members of his/her graduating class are using.

3. A student who re-enters the University after an absence of a semester or more returns under the current catalog or the catalog of his/her graduating class.

CHANGE IN CATALOG

1. If a student wishes to change catalogs, he/she may elect the current catalog or, if a transfer or re-entry, the one that most of the members of his/her graduating class are using.

2. There is no limit to the number of catalog changes the student may make as long as he/she adheres to the aforementioned stipulations.

Procedures

The student is required to complete a “Change in Catalog” form obtained from the Records Office, and return it to the same office with his/her advisor’s signature designating approval of the change.

TRANSCRIPT

The transcript of a student’s permanent course record is released only upon the written request of the student or former student and for authorized research purposes. The transcript is the official record of grades earned to date and includes the date of graduation, degree received, and date of withdrawal or dismissal. Official transcripts (with the University seal attached) are not released directly to the student, but are mailed directly to another college or authorized agency. The
first transcript is sent without charge. For subsequent copies the fee is $2.00 for one transcript. If a request is for two or more copies to the same address, the fee is $2.00 for the first copy and 50¢ for each additional copy. Payment must accompany the request.

COLLEGIATE PROFESSIONAL CERTIFICATE

The programs of study for teachers lead to the Bachelor’s degree and the Collegiate Professional Certificate.

For endorsement of the certificate to teach a specific subject, an average of 2.00 or above in that subject is required. A grade of “C” or higher on student teaching is required for a teacher’s certificate.

For information relative to renewal, extension, or reinstatement of certificates, the student should contact the Dean of the School of Education.

ACCELERATED DEGREE PROGRAM

The Degree in Three Plan, a plan through which students can complete a four-year program in three years by taking courses in the summer session as well as the regular session, is being emphasized at James Madison University because of the increasing number of students who wish to complete their formal education in a shorter period of time. Although new in emphasis, this program is not new in its conception. Madison initiated its all-year program in 1929—the first Virginia college to do so.

Along with the regular Degree in Three Plan, the University offers a variety of other means through which students can earn credit toward their degree outside the traditional classroom setting. These include:

The Admission of High School Students as Special Students—See page 35 for information concerning this special program of admission.

Admission of Freshmen with Advanced Placement—Consult page 31 for information concerning the College Board Advanced Placement Program.

The College Level Examination Program (CLEP)—Consult page 31.

Independent Study—Every department at James Madison University offers a course designed to give capable students an opportunity to do independent study under faculty guidance. Such courses often carry more than the normal three-hour credit for a semester’s work. In addition, they allow especially capable students to work at their own, often accelerated pace. Arrangements for independent study should be made through individual instructors.

56 Undergraduate Program
Study Abroad—For information concerning opportunities to study in foreign nations, consult page 54.

EARNING OF A SECOND BACCALAUREATE DEGREE

A student who has been awarded a baccalaureate degree may earn a second baccalaureate degree by meeting the following requirements:

1. Completion of a minimum of 32 semester hours of course work beyond that taken in earning the first degree. Five hundred level courses, taken for undergraduate credit, may be included in the program, but cannot be changed later to graduate credit.

2. Completion of a minimum of 2 semesters in residence, including that semester in which the requirements for the second degree are met.

3. Meeting of all prerequisite and course requirements in the second degree program.

4. Earning a cumulative quality point average of 2.00 or higher with 2.00 or higher in the second major.

COURSE NUMBERING SYSTEM

The unit of credit is the semester hour. It is defined as one lecture or two laboratory hours per week for one semester.

Each department section contains a listing of course offerings entitled “Description of Courses.” The official course title appears in italics following the course number. If a course has a separate laboratory period, the number of lecture hours and the number of laboratory hours per week will be shown in parentheses. If a course has no laboratory period, this information within the parentheses will be deleted.

Courses numbered 100–199 are intended for freshmen
Courses numbered 200–299 are intended for sophomores
Courses numbered 300–399 are intended for juniors
Courses numbered 400–499 are intended for seniors

(The Honors Thesis course required for a degree with distinction is numbered 499.)

Courses numbered 500–599 are designed primarily for graduate students but are open to qualified undergraduates who may register for these courses for undergraduate credit with the approval of their advisors.

Courses numbered 600 or above are open only to students admitted to the Graduate School.
Some courses are not offered every semester. To determine the courses offered for a particular semester, or Summer Session, the student should consult the Schedule of Classes for that session.

HONOR SYSTEM

The academic program at James Madison University is operated under an honor system whose origins date back to the first session of 1909–10. The present Honor System has been adopted by the students of James Madison University to uphold individual and community integrity. Each student is expected to observe complete honesty in all academic matters and to assume responsibility in cases in which honesty is violated. The Honor System is administered by a student Honor Council. Every student who matriculates at the University, whether graduate or undergraduate, becomes a member of the Honor System. Cooperation of faculty and administrators is expected. Full information is set forth in the student handbook and assistance is available from the Honor Council office on campus.
CONTINUING EDUCATION

The Office of Continuing Education has the responsibility for administering all off-campus credit courses and programs.

The University recognizes that many people cannot attend college on a full-time basis, and that many potential students have educational needs that do not conform to traditional academic programs. More and more high school graduates are electing to attend college on a work-study plan that makes it desirable to attend college in their home communities through off-campus enrollments. James Madison University is attempting to meet those needs. Programs leading to off-campus graduate degrees are being offered where there is demand and sufficient enrollments to support those demands.

The University is fulfilling its traditional role of providing teachers with in-service training by offering a greatly expanded off-campus program of courses especially designed for teacher certificate renewal, teacher recertification and graduate degrees in many professional teaching fields.

As part of its responsibility as a multi-purpose state regional institution, James Madison University is the focal member of the Valley of Virginia Consortium for Higher Education, and coordinates its off-campus activities through this agency to insure the most varied, efficient, and valuable educational contribution possible.

Information pertaining to off-campus credit courses and programs is available upon request from the Office of Continuing Education at James Madison University, Harrisonburg, Virginia 22801.

For information concerning non-credit courses and programs, both on and off-campus, contact the Office of Public Affairs, James Madison University.
James Madison University’s Graduate School was established in 1954, when authorization by the State Board of Education made it possible for Madison College to offer programs leading to the degrees of Master of Arts in Education and Master of Science in Education. The Southern Association of Colleges and Schools approved these graduate programs the same year. In 1960 the State Board of Education authorized the College to offer programs leading to the Master of Science degree with majors in Biology and Mathematics. This degree was extended, with approval by the State Council of Higher Education, in 1974, to include a major in Physical Education and later a major in Speech Pathology. Subsequent actions of the State Council permitted the College to offer the Master of Arts degree in Art, English, Psychology and History, and the Master of Business Administration degree. In 1973 authorization was given to offer the Master of Arts in Teaching and the Master of Education degrees. The Master of Music Education degree was authorized in 1974.

Correspondence concerning Graduate Programs and requests for the Graduate Catalog and Application for Admission to Graduate Studies should be addressed to the Dean of the Graduate School, James Madison University, Harrisonburg, Virginia 22801.
Madison Memorial Library serves as a focal point for research and study at James Madison University. The Library houses the equivalent of 350,000 volumes including books, periodicals, microforms, and government documents. The Library adds a significant number of volumes each year and currently receives 2,700 periodicals. Recently it has added such special collections as the Laird L. Conrad Memorial Law Library, various audiovisual materials, and the ultratiché Library of American Civilization containing 10,000 titles in microform. As an authorized U.S. Government Document Depository, the Library receives thousands of selected documents on a regular basis throughout the year.

To facilitate convenient and effective use of the Library, a Library Handbook has been printed, a monthly accessions list is distributed, a Quarterly is published for the faculty, and various bibliographies and short guides to the use of the card catalogs and the government documents collection have been developed. The Library is open 94 hours per week, and houses its materials on open shelves.

The Audiovisual Services of the Libraries and Learning Resources division are presently located in Wilson and Keezell Halls, but are administered in coordination with the Library operations. Audiovisual equipment, materials, and assistance are provided for use in the University’s instructional programs.
School of Arts and Sciences
SCHOOL OF ARTS AND SCIENCES

Dr. John Sweigart, Dean

The School of Arts and Sciences offers instruction in those disciplines which relate to man's cultural, social, and scientific achievement. These studies form the basis for specialization in all programs of study in the University, those in the liberal arts and sciences as well as in professional studies. It offers the student the opportunity to develop intellectual initiative, independence of thought, and discriminating judgments in order to deal effectively with the issues of contemporary life. The School includes the Departments of Art, Biology, Chemistry, Communication Arts, English, Foreign Languages and Literatures, Geology, History, Mathematics, Music, Philosophy and Religion, Physics, Political Science and Geography, and Sociology, Anthropology, and Social Work. It is the aim of James Madison University to provide excellent instruction in the course content offered by these departments as well as to develop the students' abilities to think and to respond to ideas. This liberal arts tradition is designed to prepare students to become responsible as well as responsive citizens in both their personal and community life.

DEPARTMENTS

Art ........................................ Dr. J. David Diller, Head
Biology .................................... Dr. Gilbert S. Trelawny, Head
Chemistry .................................. Dr. Benjamin A. DeGraff, Head
Communication Arts ..................... Dr. Donald L. McConkey, Head
English .................................... Dr. Mark D. Hawthorne, Head
Foreign Languages and Literatures .... Dr. Elizabeth B. Neatrour, Head
Geology .................................... Dr. William P. Roberts, Acting Head
History ................................... Dr. Raymond C. Dingleidine, Jr., Head
Mathematics ................................. Dr. William M. Sanders, Head
Music ...................................... Dr. Joseph J. Estock, Head
Philosophy and Religion .................. Dr. William E. Callahan, Head
Physics ..................................... Dr. Robert E. Kribel, Head
Political Science and Geography ......... Dr. William R. Nelson, Head
Sociology, Anthropology, and Social Work Dr. Jack H. Williams, Head

School of Arts and Sciences 63
INTERDISCIPLINARY PROGRAMS

The School of Arts and Sciences offers seventeen interdisciplinary Programs in the Humanities, Natural Sciences, and Social Sciences.

American Studies  Pre-Engineering
Criminal Justice  Pre-Law
General Science  Pre-Medical Physics
General Social Science  Pre-Medicine
Humanities  Pre-Nursing
Latin American Studies  Pre-Physical Therapy
Medical Technology  Russian Studies
Pre-Dentistry  Sino-Soviet Studies
Urban and Regional Studies

INTERDISCIPLINARY MINOR IN AMERICAN STUDIES

The minor in American Studies is based upon the desirability of developing a coordinated understanding of American civilization, past and present, acquired through (1) selected courses offered by traditional departments and (2) special courses offered by the program itself. Focus in humanistic subjects and the social sciences will provide the student with the means of exploring the interrelationships among diverse aspects of our culture and changing patterns of ideas and values.

The program is open to all undergraduate students at James Madison University enrolled in Bachelor of Arts and Bachelor of Science degree programs. The requirements are the successful completion of 24 hours drawn from the list of courses that follow. These 24 hours must include 6 hours of 100 or 200 numbered courses and 18 hours of 300, 400, or 500 numbered courses. Three of the 18 hours must come from 490 or 500 numbered courses. A student must take the 24 hours in at least three different academic areas. Sections oriented toward the needs of students taking part in the program will be designated in the 100 or 200 level courses. (Program co-chairmen will maintain such a list.) Students should consult co-chairmen about new courses and the appropriateness of topics in Special Studies/Special Topics courses.

Further information may be secured from Dr. Sidney Bland, History Department, Jackson 215, or from Dr. Cameron Nickels, English Department, Keezell 213.

American Studies Courses

<table>
<thead>
<tr>
<th>American Studies</th>
<th>Anthropology</th>
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</thead>
<tbody>
<tr>
<td>200—Chandler Hall Colloquium</td>
<td>282—Cultures of Appalachia</td>
</tr>
<tr>
<td>250—Introduction to American Studies</td>
<td>286—American Folk Culture</td>
</tr>
</tbody>
</table>

Interdisciplinary Programs
312—North American Indians
327—North American Archaeology
338—Black Rural Folk Culture
490—Special Studies in Anthropology*
544—Field Techniques in Archaeology*

Art
408—Art History: Arts of the United States
490—Special Studies in Art*
508—Internship—Museology (Crosslisted with History)

Economics
310—Economic History of the United States

Communication Arts
335—Free Speech in America
387—History of American Journalism
422—Contemporary Rhetoric
490—Special Studies in Communication Arts*
540—Seminar in Theater*
545—American Theater History
560—Seminar in Broadcast Media*
580—Seminar in Journalism*

English
247-248—Survey of American Literature
302—Special Topics in Literature and Language*
341—Early American Literature
345—American Romanticism 1820-1865
351—American Realism and Naturalism to 1914
355—Southern Literature
441—The American Novel to 1914
445—The Modern American Novel
480—Twentieth-Century British or American Author*
510—Special Authors Seminar*
512—Special Topics Seminar*

Geography
236—Geography of Anglo-America

History
233-234—United States History
300—American Military History
348—Colonial American History
350—Virginia History
353—Trans-Mississippi West
355—Afro-American History to 1877
356—Afro-American History since 1877
405—Women in United States History
425—Civil War and Reconstruction
430—The United States and the Contemporary World
439—Selected Topics in American History*
490—Special Studies in History*
508—Internship—Museology (Crosslisted with Art)
520—United States History 1763-1800
525—United States History 1800-1850
530—United States History 1877-1919
531—Recent United States History

Music
202—Black, Jazz and Related American Music

Philosophy
290—Topics in Philosophy*
370—American Philosophy
490—Special Studies in Philosophy*

Political Science
225—United States Government
226—State and Local Government
308—Current Problems in Political Science
330—American Political Thought
369—Political Parties and Elections
370—United States Foreign Policy
490—Special Studies in Political Science*
501—Workshop in Political Science*
540—Problems of American National Government

Religion
290—Topics in Religion*
340—Religion in America
490—Special Studies in Religion*

Sociology
139—Introduction to Sociology
364—American Sects and Cults
490—Special Studies in Sociology*

*When the topic is applicable to American Studies.
American Studies Interdisciplinary Courses

AMST. 200. Chandler Hall Colloquium, 1 credit.
Interdisciplinary lectures and discussions of books and ideas which may be significant in the future of American civilization.

AMST. 250. Introduction to American Studies, 3 credits.
An introduction to the methods and concepts that represent the American Studies approach to the study of American civilization.

INTERDISCIPLINARY MINOR IN CRIMINAL JUSTICE

The interdisciplinary minor in Criminal Justice is designed for students who are preparing for careers in law enforcement, corrections, or court administration at various governmental levels, either directly upon graduation or after further graduate training in the field.

Students, in addition to completing the requirements of their chosen major, must complete a minimum of 24 hours consisting of 18 hours of required courses and 6 hours of approved electives. The required courses are PoSc. 215, Introduction to Criminal Justice; PoSc. 301, Criminal Justice; PoSc. 302, Criminal Procedures; PoSc. 327, Criminal Law; Psyc. 358, Abnormal Psychology; and Soci. 425, Criminology. The elective courses are PoSc. 210, Introduction to Law and Jurisprudence; PoSc. 326, Civil Rights; PoSc. 390, Judicial Process; PoSc. 410, Administration in Criminal Justice; Soci. 314, Sociology of Deviance; Soci. 427, Juvenile Delinquency; Soci. 430, Penology; Phil. 440, Professional Ethics; PoSc. 496, Internship in Public Administration; PoSc. 497, Internship in Law; Psyc. 397, Field Experience in Abnormal Psychology; SoSW. 480, Social Work Field Placement I; SoSW. 482, Social Work Field Placement II; and SoSW. 485, Social Work Field Placement III.

For further information and advisement regarding the Criminal Justice minor, students should contact Mr. Vernon Mechtensimer in Burruss 1, Political Science and Geography Department.

MAJOR IN GENERAL SCIENCE

This program is an interdisciplinary major in General Science. It is designed primarily for prospective secondary school teachers meeting the requirements for dual teaching certification in (1) General Science and (2) at least one other science area chosen from the disciplines of Biology, Chemistry, Geology (Earth Science) or Physics.

The requirements for a major in General Science are as follows:

1. A total of 48 hours of courses taken from the disciplines of natural science. Courses considered strictly as a General Studies requirement for non-science majors cannot be counted in this total. (Examples: Bio. 100 and 105, Chem. 110 and Phys. 109)
2. Eight semester hours must be taken in each of at least three different sciences.

3. At least 12 hours of the 48 hour major must be taken from courses at the 300 level or higher.

4. If seeking State of Virginia teaching certification, a sufficient concentration of courses must be taken in at least one science area to meet certification requirements for that discipline.

5. A minimum of 6 hours from any of the following Mathematics Department offerings: 105, 106, 125, 126, 135, 220, 235, or 236.

6. It is strongly recommended that General Science majors take the course Philosophy of Science (Phil. 390) in their junior or senior year.

A minor in General Science requires 8 credits in each of three of the science disciplines.

Students interested in a major in General Science should consult Dr. H. Kent Moore, 131 Miller Hall.

### MAJOR IN GENERAL SCIENCE (B.S. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
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<tr>
<td>Eng. 101-102</td>
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<td>Electives (Science)</td>
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<tr>
<td>Electives</td>
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<td>Fine Arts</td>
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### PROGRAM FOR A MAJOR IN GENERAL SCIENCE QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification in General Science must complete the following as a part of their program:

Interdisciplinary Programs 67
(1) Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
(2) Educ. 360—*Foundations of Curriculum* (junior year).
(3) SeEd. 3711—*Clinical Techniques, Natural Science Methods* (normally in the first semester of the senior year).
(4) Educ. 470—*History and Philosophy of Educational Thought* (senior year)

or

Educ. 471—*Values and Teaching* (senior year).
(5) Educ. 480—*Student Teaching* (senior year).
(6) A course in U.S. History (anytime in the program).
(7) Hth. 370—*The School Health Program* (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

**Sciences Interdisciplinary Courses**

In addition to the course offerings of the science departments, the following interdepartmental courses are offered:


A science course which deals with the methods, materials, and literature of biological and physical science in the elementary school. The laboratory work consists of activities selected jointly by the students and the instructors on the basis of value for elementary school teaching.

SCI. 490 B-C-G-P. *Seminar for Science Teachers* (0, 2), 1 credit.

B—Biology; C—Chemistry; G—Geology; P—Physics.

Centers about problems encountered in teaching general science, biology, chemistry, geology, and physics. Students will work on selected problems in these fields using reports, discussions, demonstrations, audiovisual aids, and other instructional materials. **Prerequisite:** A course in the science discipline appropriate to the section for which the student is registered.

**MAJOR IN GENERAL SOCIAL SCIENCE**

The major in General Social Science is 48 semester hours with 18 semester hours in History, 12 hours in Political Science, 6 hours in Economics, 6 hours in Geography, and 6 hours in Sociology-Anthropology. A minor is not offered in General Social Science. Students seeking information concerning this program should contact Dr. Frederick C. Mortimer, 10 Burruss Hall.

68 *Interdisciplinary Programs*
### MAJOR IN GENERAL SOCIAL SCIENCE
#### (B.A. Degree)

<table>
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<td>Phil. 240</td>
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*Foreign Language (if needed) or Electives | 6 |

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*See Foreign Language requirements for B.A. Degree

### MAJOR IN GENERAL SOCIAL SCIENCE
#### (B.S. Degree)

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#### Interdisciplinary Programs | 69
PROGRAM FOR A MAJOR IN
GENERAL SOCIAL SCIENCE
QUALIFYING FOR THE SECONDARY
COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

1. Psyc. 233 and 234—Human Growth and Development (sophomore year).
2. Educ. 360—Foundations of Curriculum (junior year).
3. SeEd. 371H—Clinical Techniques, Social Science Methods (normally in the second semester of the junior year or first semester of the senior year).
4. Educ. 470—History and Philosophy of Educational Thought (senior year) or Educ. 471—Values and Teaching (senior year).
5. Educ. 480—Student Teaching (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—The School Health Program (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Social Science Interdisciplinary Courses

SOCS. 401. Seminar in Social Science, 3 credits.

A seminar for General Social Science majors and others interested in the integration of content and methodology in the social sciences. Prerequisites: Junior or senior standing and at least 24 hours in history and the social sciences.

SOCS. 501. Workshop in Social Science, 3 credits.

Designed primarily for social studies teachers desiring to work within an interdisciplinary framework on a subject of current need and interest in the social sciences.

Humanities Interdisciplinary Courses

The School of Arts and Sciences offers the following interdisciplinary courses in the Humanities:

HUM. 200. The Age of Pericles, 3 credits.

A team-taught, multi-dimensional study of the forces that shaped the highest cultural and intellectual achievement of Greek civilization. Students will examine the interrelationships among politics, drama, art, philosophy, and the attitudes of intellectuals in fifth-century Athens.

Interdisciplinary Programs
HUM. 201. Spirit and Symbol: Romantic and Modern, 3 credits.

HUM. 202. Spirit and Symbol: Renaissance and Baroque, 3 credits.

Hum. 201 and 202 are complementary courses offering a team-taught, interdisciplinary investigation of the interplay of the humanistic, artistic, and cultural forces in art, music, rhetoric, literature, and philosophy. The comparative approach encompasses leading works, figures, movements, and contexts of the periods indicated.

HUM. 250. Meaning and Response in the Arts, 3 credits.

An interdisciplinary, team-taught course whose focus is the aesthetic experience and the means by which the artist—whether he is a painter, sculptor, musician, film director, or writer—makes that experience happen. Specific works in the visual arts, in music, in literature and the cinema are examined to unfold the creative process.


A study of West African Culture and its influence on the Western World.

HUM. 290. Topics in the Humanities, 1-3 credits.

An interdisciplinary study of selected topics in the Humanities at the lower division level. No prerequisite. May be repeated for credit.

HUM. 501. Workshop in Humanities, 3 credits.

Designed primarily for humanities teachers who wish to work within an interdisciplinary framework to increase their knowledge and sharpen their skills in various areas of humanistic studies. Topics and areas will be varied from year to year, according to need and interest.

INTERDISCIPLINARY MINOR IN LATIN AMERICAN STUDIES

This minor concentration is designed for students who wish to expand their understanding of Latin America. Language requirements for the B.A. degree must be met in Spanish. The minor requires 18 hours, in addition to those in the language. Six hours must be in Hist. 267-268. The additional 12 hours must include courses in at least two disciplines other than the student’s major, selected from the offerings listed in the program. Students are encouraged to explore opportunities for living and studying in a Latin American country for a semester or summer session.

Contact Dr. Frank A. Gerome, History Department, 211 Jackson Hall, for further information.

Program for Minor in Latin American Studies

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<tr>
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<th>Credit Hours</th>
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<td>Anth. 325</td>
<td>Indian Societies of Mexico and Central America</td>
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<tr>
<td>Art 303</td>
<td>Pre-Columbian Latin American Art</td>
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<td>Geog. 337</td>
<td>Geography of Latin America</td>
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<tr>
<td>Geog. 590</td>
<td>The Tropical World</td>
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</tr>
<tr>
<td>Hist. 267</td>
<td>History of Latin America</td>
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<tr>
<td>Hist. 268</td>
<td>Contemporary Latin America</td>
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</tr>
<tr>
<td>Hist. 545</td>
<td>Latin America and the United States</td>
<td>3</td>
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</table>

Interdisciplinary Programs 71
Credit Hours
Hist. 546. Mexico, Central America, and the Caribbean ........................................... 3
Hist. 547. South America ................................................................. 3
PoSc. 350. Governments of Latin America ........................................... 3
Span. 101-102. Elementary Spanish (if needed) ........................................ 8
Span. 231-232. Intermediate Spanish ................................................... 6
Span. 300. Spanish Conversation and Composition .............................................. 3
Span. 308. Latin American Civilization ..................................................... 3
Span. 315. Spanish Phonetics ................................................................. 3
Span. 327-328. Survey of Spanish-American Literature ....................................... 3
Span. 415. The Spanish-American Novel ...................................................... 6
Special Studies 490. (Anthropology, Art, Geography, History, Political Science or Spanish) .................................................. 3

TWO-YEAR PRE-ENGINEERING PROGRAM

James Madison University offers a two-year pre-engineering program designed to provide most of the basic requirements of the first two years of a standard engineering curriculum. Upon completion of this program, one may expect to complete the Bachelor of Science degree in any of the specialized areas in at most three years. Students are urged to acquaint themselves with the requirements of the specialized area at the college or university to which they expect to transfer.

Students interested in this program should consult Dr. George Marrah, Burruss Hall, for additional information, planning of programs, and selection of electives.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
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<th>Credit Hours</th>
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<td>Chem. 101-102</td>
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<td>Math. 237-386</td>
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<td>Eng. 101-102</td>
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<td>Engr. 201-202</td>
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<td>Math. 235-236</td>
<td>10</td>
<td>Physics 231-232</td>
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<td>Engr. 101-102</td>
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<td>Math. 238</td>
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Pre-Engineering Interdisciplinary Courses


The fundamentals of using graphical techniques for engineering design. Geometric construction, multiview drawing and sketching, sectioning, auxiliary views, assembly drawing, curved surfaces, development, scheduling and planning projects, working drawings and design analysis.

ENGR. 201. *Static*, 3 credits.

A vector and scalar approach to the analysis of systems. Resolution of forces, friction, centroids, moments of inertia, equilibrium of bodies and simple structures including trusses and frames.

72 Interdisciplinary Programs
ENGR. 202. Dynamics, 3 credits.
A study of the kinematics and kinetics of particles and rigid bodies using vector methods, energy methods and momentum methods.

PRE-LAW PROGRAM

Students who plan to apply to law school may select their major from a wide range of fields, depending upon their interests. The scope of the law is broad and offers room for individuals of varied educational and intellectual backgrounds. The students' total programs should provide them with broad informational and cultural preparation and should help them in developing their reasoning abilities.

Certain courses are of value as preparation for legal study. These include courses in communication, including composition, language, and speech, which enable students to express themselves well; in the liberal arts, including work in the humanities and social studies, which help them appreciate and perform effectively in their culture and society; in logic, mathematics, and the natural sciences, which develop skills of fact discrimination, analysis, and synthesis; and in accounting.

Students interested in the pre-law program should contact the pre-law advisors, Professor David A. Hamilton, Professor Arthur J. Hamilton, or Dr. William R. Nelson. Students may also join the Pre-Legal Society to participate in law-related activities.

INTERDISCIPLINARY PROGRAMS IN RUSSIAN AND SINO-SOVIET STUDIES

The broad objective of these programs is to develop an understanding of societies other than those in the mainstream of Western Civilization with respect to their internal development, their relation to each other, and their relation to the rest of the world, particularly the United States. This major is interdisciplinary and depends upon the resources available in several departments. Two separate programs have been developed: (1) A major in Russian Studies leading to a B.A. degree which will include at least two years of the Russian language and, (2) a major in Sino-Soviet Studies leading to either the B.A. degree, including the language requirement, or the B.S. degree for which there is no language requirement.

Majors

The minimum requirement for a major in Russian Studies is 30 hours; for a major in Sino-Soviet Studies, 42 hours. Required courses for both programs include the following: PoSc. 240 and 320, Econ. 301, Geog. 348, Hist. 385-386. In addition, students in the Russian Studies program will be required to take Rus. 265, 266, plus one three-hour elective listed below; students in the Sino-Soviet program will be re-
quired to take Rus. 265 or 266, Hist. 273, 450, and 575, PoSc. 332, 334 and 430, plus one three-hour elective listed below. Electives for Russian Studies include Rus. 300 and 308, PoSc. 430, PoSc. 338, SSov. 400, and Special Studies 490 in Economics, Geography, History, Political Science, Russian, or Sociology; electives for Sino-Soviet Studies include Art 301, Rus. 265 or 266, Geog. 349, SSov. 400, and Special Studies 490 in Economics, Geography, History, Political Science, Russian, or Sociology. Description of these courses may be found under the individual departmental listings.

Minors

A minor in one of these two programs may be taken by students in other departments to provide a specialized knowledge which can supplement the more general knowledge provided by his/her major discipline. A minor in Russian Studies includes 18 hours and a minor in Sino-Soviet Studies includes 24 hours. With the approval of the Advisor to the program, 6 to 8 hours of Russian language may be included in the minor.

In addition to the General Studies and academic major requirements, students desiring teaching certification should consult the Teacher Certification Requirements Manual. This manual is available in each academic department and in the School of Education.

Further information concerning these programs may be obtained by consulting Dr. Chong-Kun Yoon, Department of History or Dr. Elizabeth Neatour, Department of Foreign Languages and Literatures.

MAJOR IN RUSSIAN STUDIES
(B.A. Degree)

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(B.S. Degree)

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### MAJOR IN SINO-SOViet STUDIES
(B.A. Degree)

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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Credit Hours</th>
<th>Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td></td>
<td>Senior</td>
<td></td>
</tr>
<tr>
<td>Econ. 301</td>
<td>3</td>
<td>PoSc. 320</td>
<td>3</td>
</tr>
<tr>
<td>Geog. 348</td>
<td>3</td>
<td>PoSc. 332</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 273</td>
<td>3</td>
<td>PoSc. 334</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 450</td>
<td>3</td>
<td>PoSc. 430</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 240</td>
<td>3</td>
<td>Electives</td>
<td>20</td>
</tr>
<tr>
<td>Rus. 265 or 266</td>
<td>3</td>
<td>Sino-Soviet Studies Elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
<td>Electives</td>
<td>32</td>
</tr>
</tbody>
</table>

Interdisciplinary Programs 75
Russian and Sino-Soviet Studies Interdisciplinary Course

SSOV. 400. Seminar in China and Russia, 3 credits.

A comparative investigation of selected topics on the political, social, economic, intellectual, and cultural institutions of China and Russia with an emphasis on the modern period. Students should consult the Schedule of Classes to determine the topic for a given semester.

INTERDISCIPLINARY MINOR IN URBAN AND REGIONAL STUDIES

The interdisciplinary minor in Urban and Regional Studies is designed for students who are preparing for careers in government or graduate training in the field.

While satisfying the B.A. or B.S. requirements of their chosen major, students may complement that major with a minor in Urban and Regional Studies. The minor requires 24 hours. The following 18 hours are required: Econ. 475, Regional Economics; Geog. 410, Urban Geography; PoSc. 360, Urban Politics; PoSc. 425, Regional Planning and Organization; Soci. 265, Sociology of the Community; Soci. 470, Urban Sociology. The additional 6 hours must be in a discipline other than the student's major and chosen from the following: Fin. 310, Real Estate; Econ. 326, Public Finance; Econ. 340, Economics of Natural Resources; Geog. 315, Field Studies; Geol. 330, Environmental Geology and Limitations of the Earth; Geol. 340; Soil and Land Use; PoSc. 226, State and Local Government; PoSc. 303, Political, Economic and Social Problems of Environmental Law; PoSc. 495, Internship in Political Science; Soci. 252, Population and Human Ecology; Soci. 361, Bureaucracy and Modern Society.

Information and preliminary advising is available. Interested students should contact Dr. Joseph Enedy, Department of Political Science and Geography, 15 Burruss Hall.

ALLIED HEALTH PROGRAMS AND HEALTH RELATED PRE-PROFESSIONAL PROGRAMS

James Madison University offers four Allied Health Programs and five health related pre-professional programs. Although these programs are health related, they are administered under different schools. The descriptions of the programs will be found in the departmental sections as indicated below.

Medical Technology ........ Biology and Chemistry Departments
Dietetics ....................... Home Economics Department
Health (Pre-Public) .......... Physical and Health Education Department
Pre-Medical Physics .......... Physics Department
Pre-Medicine .......... Biology Department
Pre-Dentistry .......... Biology Department
Pre-Nursing .......... Biology Department
Pre-Physical Therapy .......... Biology Department
Speech Pathology .......... Speech Pathology and Audiology Department

PROGRAM IN MEDICAL TECHNOLOGY

This is a program leading to the Bachelor of Science degree in medical technology. It is offered cooperatively with schools of medical technology on the approved list of the Council of Medical Education and Hospitals of the American Medical Association and the National Accrediting Agency for Clinical Laboratory Sciences.

The degree is conferred by James Madison University upon the successful completion of the following three-year program at the University and one academic year at an approved school of medical technology. Upon completion of the full twelve-months course in medical technology, the student is given a diploma by the National Accrediting Agency for Clinical Laboratory Sciences and becomes eligible for the national examination for certification by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

MAJOR IN MEDICAL TECHNOLOGY
(B.S. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 120</td>
<td>4</td>
<td>Bio. 270</td>
<td>3</td>
</tr>
<tr>
<td>Chem. 101-102</td>
<td>8</td>
<td>Bio. 290</td>
<td>4</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Chem. 235-236 or 237-238</td>
<td>8</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Math. 105</td>
<td>3</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Math. 220</td>
<td>3</td>
<td>Social Science</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>Elective**</td>
<td>2</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Students electing to attend a "2-2" program should take Chem. 356 their sophomore year.

Interdisciplinary Programs 77
Credit Hours

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 280</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 360</td>
<td>3</td>
</tr>
<tr>
<td>Chem. 356</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 109</td>
<td>4</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
</tr>
</tbody>
</table>

Senior Year

The fourth year of this program consists of twelve months at a school of medical technology approved by the American Medical Association and the National Accrediting Agency for Clinical Laboratory Sciences.

To enter a school of medical technology, a separate application must be made by the student. A list of approved schools of medical technology is on file in the office of the student’s advisor.

Students interested in a major in medical technology should consult Mr. Robert Graves, Biology Department, 317 Burruss Hall.

PRE-MEDICAL PHYSICS PROGRAM

Medical Physics is concerned with the applications of the concepts and methods of physics to the diagnosis and treatment of human disease. It is closely allied with medical electronics (the development of medical instruments), health physics (the assessment and control of radiation hazards), and bioengineering (the application of engineering principles to biology). Medical physics includes the work physicists perform in the following well-established areas of medicine: therapeutic radiology, diagnostic radiology, nuclear medicine, radiobiology, hospital health physics (radiation protection), as well as in the emerging fields of physiologic monitoring of patients, ultrasound, lasers, ophthalmology, thermography, and information theory. James Madison University’s program in Medical Physics is designed to prepare students for graduate study leading to a career in any of the above areas. The Pre-Medical Physics program is very compatible with major programs in Biology, Chemistry, Mathematics, or Physics.

Students interested in this field should take Math. 235-236, Calculus; General Physics (Phys. 231-232 highly recommended), and include as many of the following courses in their program as possible:

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 270</td>
<td>Physiology</td>
</tr>
<tr>
<td>290</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>Chem. 237</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>238</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Math. 238</td>
<td>Computer Programming</td>
</tr>
<tr>
<td>Phys. 230</td>
<td>Health Physics</td>
</tr>
<tr>
<td>241</td>
<td>Electronics</td>
</tr>
<tr>
<td>252</td>
<td>Electronic Instrumentation</td>
</tr>
</tbody>
</table>
Pre-Medical Physics students should seek regular academic advice at the beginning of their undergraduate careers. Students who are interested in this area should consult Mr. Burton Conway, 127 Miller Hall.

**PRE-MEDICAL AND PRE-DENTAL PROGRAMS**

James Madison University is well equipped to prepare students for admission to medical and dental schools. The requirements of most schools are very similar, however, the students should become familiar with the requirements of the particular school in which they are interested.

Medical and dental schools require at least three years of college preparation but prefer that their candidates complete the full four years leading to a bachelor’s degree. They specify a minimum amount of biology, chemistry, mathematics and physics but they want the pre-medical student to obtain a broad cultural background in such fields as literature, social science, psychology, philosophy and the fine arts. These minimum course requirements can be met by the completion of the following:

- Bio. 120-130. General Biology
- Chem. 101-102. General Chemistry
- 234. Organic Chemistry Laboratory
- 235-236. Organic Chemistry Lecture
- Math. Calculus is recommended
- Phys. 130, 135. General Physics
- or
- Phys. 231-232 General Physics
  (recommended for students with calculus)

Although medical and dental schools do not exhibit a preference as to specific undergraduate majors, they do recommend that a student should pursue a specific program in some depth.

Pre-medical and pre-dental students should seek regular academic advice at the beginning of their undergraduate careers. Students who are interested in these areas should consult Dr. Gilbert S. Trelawny, 312 Burruss Hall.

**TWO-YEAR PRE-NURSING PROGRAM**

The first two years of a program leading to the degree of Bachelor of Science in Nursing may be completed at James Madison University.
with the remainder of the period of study at an accredited baccalaureate school of nursing. A separate application for admission to a specific Nursing Program must be made during the fall semester of the sophomore year. Application forms may be obtained from the Office of Admissions at the school of the student’s choice. Students should confer closely with an academic advisor and plan a program of study to meet the specific prerequisites for the school they are planning to enter.

Students with special problems or with questions concerning the first two years of the nursing program should consult Mr. Norlyn Bodkin or Mrs. Margaret Gordon, Biology Dept.

**GENERAL PRE-NURSING**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 100 or 120</td>
<td>4</td>
<td>Bio. 270</td>
<td>3</td>
</tr>
<tr>
<td>Bio. 290</td>
<td>4</td>
<td>Bio. 280</td>
<td>4</td>
</tr>
<tr>
<td>Chem. 121-122</td>
<td>8</td>
<td>Psyc. 231-232</td>
<td>6</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Soci. 139</td>
<td>3</td>
</tr>
<tr>
<td>Hist.</td>
<td>6</td>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Electives (Math. 220, Physics or additional humanities)</td>
<td>7</td>
</tr>
</tbody>
</table>

**TWO-YEAR PRE-PHYSICAL THERAPY PROGRAM**

The first two years of the program leading to the degree of Bachelor of Science in Physical Therapy may be completed at James Madison University and the remaining two years at some school of physical therapy. Students should ascertain the admission requirements from the physical therapy school of their choice and choose the specific courses to meet these requirements.

The following are recommended courses that will meet the requirements of most physical therapy schools which accept students after two years of study.

Students interested in Physical Therapy may consult Mr. Robert Graves, 317 Burruss Hall.
## PRE-PHYSICAL THERAPY

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Bio. 120</td>
<td>4</td>
</tr>
<tr>
<td>Chem. 121-122</td>
<td>8</td>
<td>Bio. 290</td>
<td>4</td>
</tr>
<tr>
<td>Math. 105-106</td>
<td>6</td>
<td>Bio. 270</td>
<td>3</td>
</tr>
<tr>
<td>Psyc. 231-232</td>
<td>6</td>
<td>Phys. 130-135</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

Interdisciplinary Programs 81
DEPARTMENT OF ART

Dr. J. David Diller, Head of the Department

Professors Diller and Theodore; Associate Professors Beer, M. Caldwell, and Coulter; Assistant Professors Crable, Hawkins, James, Szmagaj, B. Wyancko, and R. Wyancko; Instructors Benson, Chaelain, Giles, McCaslin, Miyata, Tschudi, and Zapton.

The Art Department aims to provide a balanced background in art for those students seeking careers as practicing artists, art historians or as teachers of art on the secondary or elementary level. It provides the foundation for advanced art studies, and in certain major studio fields also provides advanced studies intended to develop highly competent artists and teachers. For the general student, as well as the art student, this department seeks to develop perceptual insights, including a sensitivity to the values expressed through the visual arts by a wide variety of cultures.

Art majors with a studio emphasis may elect the Bachelor of Fine Arts degree or the Bachelor of Science degree. The B.F.A. is intended primarily for those whose aim is professional production in art, and it provides some concentration in specified areas. Teacher certification with the B.F.A. is possible, but requires more credits than the minimum 128 hours for graduation. The B.S. is intended for those who wish to achieve teacher certification in art within the minimum of 128 semester hours, or who prefer a program less intensively oriented to art than the B.F.A. provides.

Art History Majors study under the Bachelor of Arts degree program only.

In addition to General Studies requirements (See pgs. 39-41), the Bachelor of Fine Arts degree requires a minimum of 60 semester hours in Art including one of the General Studies courses dealing with the visual arts. The remaining credits are organized as follows:

<table>
<thead>
<tr>
<th>I. Required core courses in Art</th>
<th>30 sem. hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 140, 141 Design; Art 150, 151 Drawing</td>
<td>12</td>
</tr>
<tr>
<td>Art 205, 206, and an elective Art History</td>
<td>9</td>
</tr>
<tr>
<td>Art 235 Sculpture, 360 Painting</td>
<td>6</td>
</tr>
<tr>
<td>Art 380 Seminar in Aesthetics</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Specified courses in an area of concentration</th>
<th>18 sem. hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Painting and Graphics Area</td>
<td></td>
</tr>
<tr>
<td>All students in area take Art 350A, 460A, and Art 353 or 354.</td>
<td></td>
</tr>
<tr>
<td>Option 2) 9 hrs. from 255, 355A, 355B, 355C (Photography).</td>
<td></td>
</tr>
</tbody>
</table>
B. Crafts Area
All students in area take Art 121, 122, 125.
Option 2) Art 322A, 322B, 322C (Metal and Jewelry).
Option 3) Art 373, 474A, 474B (Ceramics).

C. Design Area
All students in area take Art 245, 344, 350A.
Option 2) 9 hrs. from 345, 444A, 444B, 444C (Comprehensive Design).

D. Sculpture Area
All students in area take 344, 450A, and 3 hrs. from 121, 122, 125, or 373; plus Art 434A, 434B, and 434C.

III. Electives in Art ........................................... 9 credit hrs.
IV. Electives in any area chosen by student ................. 30 credit hrs.

The Bachelor of Science in Art requires, in addition to General Studies, 42 semester hours in the major including 3 hours of Art 200, or 201. The program is subject to approval of the Head of the Department. A minor includes a minimum of 18 semester hours, subject to the approval of the Head of the Department.

The major in Art History requires a minimum of 33 semester hours, including:

1. at least 24 hours of art history. Art 205, Art 206, and Art 380 are required, as are 3 hours from Art 200, or 201.

2. not more than 6 nor fewer than 3 hours of studio art selected from Art 121, 122, 125, 140, 141, 150, 151, 160, 235, 255.

3. not more than 6 nor fewer than 3 hours in related courses outside the Art Department selected from Eng. 240, Lat. 458, Hum. 200, History courses above the 200 level.

Majors in Art History are encouraged to take as many courses as possible in one or two foreign languages and in the humanities generally.

The Art Department reserves the right to retain permanently one work from each student in each class. The disposition of these works will be decided by the art staff.

The curricular sequence by which individual students fulfill degree requirements will vary depending upon the choice of major, academic degree, and whether teaching certification is sought. It is important, therefore, that students work closely with their advisors in fulfilling
these requirements, and that prerequisites for individual courses also be fulfilled.

### MAJOR IN ART (B.F.A. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 140, 141</td>
<td>6</td>
<td>Art 205, 206</td>
<td>6</td>
</tr>
<tr>
<td>Art 150, 151</td>
<td>6</td>
<td>Art 235</td>
<td>3</td>
</tr>
<tr>
<td>Art 200, or 201</td>
<td>3</td>
<td>Art 360</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Art in area of concentration</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>8</td>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

### MAJOR IN ART (B.S. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 140</td>
<td>3</td>
<td>Art 141</td>
<td>3</td>
</tr>
<tr>
<td>Art 150</td>
<td>3</td>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
</tr>
<tr>
<td>Art 200 or 201</td>
<td>3</td>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Art Elective</td>
<td>3</td>
<td>Natural Sciences</td>
<td>8</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>6</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior Year

| Art Electives                | 9            | Art Electives                    | 9            |
| Social Science or            | 3-4          | Electives                        | 24           |
| Natural Science              | 3-4          |                                  | 33           |
| Electives                    | 19           |                                  |              |
|                              | 31-32        |                                  |              |

84 Art
# MAJOR IN ART HISTORY
(B.A. Degree)

### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 200 or 201</td>
<td>3</td>
<td>Art 205-206</td>
<td>6</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Foreign Language (if needed)</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>6-8</td>
<td>or Electives</td>
<td>6</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4</td>
<td>Natural Science</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>31-33</td>
<td>Social Science</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Senior Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History Electives</td>
<td>12</td>
<td>Art 380</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy</td>
<td>3</td>
<td>Art History Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td>Electives from list of Related Courses and/or Studio Courses</td>
<td>6</td>
</tr>
<tr>
<td>Elective from list of Related Courses</td>
<td>4</td>
<td>Electives</td>
<td>21</td>
</tr>
<tr>
<td>Elective from list of Studio Art Courses</td>
<td>3</td>
<td>Electives</td>
<td>33</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PROGRAM FOR A MAJOR IN ART QUALIFYING FOR THE SECONDARY OR K-12 COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary or K-12 certification must complete the following as a part of their program:

1. Psyc. 223 and 234—*Human Growth and Development* (sophomore year).
2. Art 310*—*Art Activities in the Elementary School* (*for Art majors, normally in the junior year*).
4. SeEd. 371A—*Clinical Techniques, Art Methods* (normally in the first semester of the senior year).
5. Educ. 470—*History and Philosophy of Educational Thought* (senior year).
7. A course in U.S. History (any time in the program).
(8) Hth. 370—*The School Health Program* (any time in the program).

(9) Students program must include the following minimum requirements in the various areas of art:

   
   (140, 150, 151, 245, 345, 354, 360, 366, 456, 460)

II. Sculpture—6 sem. hrs.

   (141, 235, 434)

III. Ceramics and Crafts—6 sem. hrs.

   (121, 122, 125, 321, 322, 373, 474)

IV. Art History and Art Appreciation—6 sem. hrs.

   (200, 201, 205, 206, 301, 303, 305, 306, 380, 405, 406, 408)

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

**Description of Courses**

**Art History and Appreciation Courses**

**ART 200. Art in General Culture, 3 credits.**

An exploratory course which aims to develop a non-technical, general cultural understanding of the space arts, such as architecture, painting, sculpture, and industrial design. Emphasis is on the contemporary.

**ART 201. Art and Its Purpose, 3 credits.**

A thematic approach to the appreciation of art, examining how art has helped man come to terms with his environment.

**ART 205. Art History: Prehistoric Through Medieval Art, 3 credits.**

A study of the architecture, sculpture, painting, and other arts from prehistoric times to the beginning of the Renaissance.

**ART 206. Art History: Renaissance Through Modern Art, 3 credits.**

A study of the architecture, sculpture, painting, and other arts from the Renaissance to the present day.

**ART 240. History of Interior Design, 3 credits.**

A survey of the evolution of design in interiors from ancient to modern times with emphasis on period styles, architectural backgrounds, residential and public design.

**ART 301. Art History: Far East, 3 credits.**

A survey of East Asian Art from prehistoric times to nineteenth century colonialism. Emphasis is on the areas of major production: India, China, and Japan, with some attention to such centers as Cambodia, Siam, and Korea.

**ART 303. Pre-Columbian Latin American Art, 3 credits.**

A study of the art and architecture of Pre-Columbian Latin America. Emphasis will be on Mexico and Peru. Included will be processes used to create works of art.
ART 305. *Art History: Medieval Art*, 3 credits.
A study of religious art and architecture from Early Christian catacombs through the culminating expression of Gothic cathedrals (300-1300). Attention will be focused on the later period, Romanesque and Gothic, in western Europe (1000-1300). *Prerequisite: Art 205.*

ART 306. *Art History: Renaissance*, 3 credits.
A study of the arts of the Renaissance in Italy and the Northern European countries from 1425 to about 1600. *Prerequisite: Art 206.*

Readings and discussions in the persistent philosophical problems of the arts, centering on consideration of the work of art, the artist, and the audience. *Prerequisite: 3 hours from Art 200, or 201, or permission of Department Head.*

ART 405. *Art History: The Nineteenth Century*, 3 credits.
A study of art in Europe during the 19th century. *Prerequisite: Art 206.*

ART 406. *Art History: The Twentieth Century*, 3 credits.
A study of art in Europe and America during the 20th century. *Prerequisite: Art 206.*

ART 408. *Art History: Arts of the United States*, 3 credits.
A study of the arts of the United States from the 17th through the 19th centuries.

ART 503. *Studies in Greek Art*, 3 credits.
A selection of specialized topics in the arts of ancient Greece. Sculpture, architecture, pottery and other arts of a given period will be studied in depth. *Prerequisite: Art 205.*

ART 505. *Nineteenth-Century Art*, 3 credits.
A seminar dealing with important aspects of the art of the Western World during the 19th century. *Prerequisite: Art 206 or equivalent.*

ART 506. *Twentieth-Century Art*, 3 credits.
A seminar investigating in depth selected movements and philosophies in art of the 20th century. *Prerequisite: Art 206 or equivalent.*

A study of the architecture of 19th and 20th century Europe and America.

ART 508. *Internship in Museology*, 3-6 credits repeatable. (Crosslisted as Hist. 508.)
An internship program which allows the student to study the philosophy and practice of museology and provides an opportunity for individual research and experience in preparation for careers in art museums. Enrollment in this course subject to approval of Art and History Department Heads.

**Art Education Courses**

ART 310. *Art Activities in the Elementary School* (1, 4), 3 credits.
A study of the aims and philosophy of art education in the elementary school with emphasis on child growth and development through art. Experience with art techniques and materials suitable to children from nursery school through grade 6 with emphasis on
appropriate motivational and teaching methods. Prerequisites: Psyc. 233-234 or permission of Department Head.

ART 314. Arts and Crafts for the Exceptional Child (1, 4), 3 credits.

A study of art activities and materials which stimulate thought processes and development from one stage of growth to another. Analysis of successful teaching methods. Investigation of the effect of art instruction upon the student’s behavior in his/her class, in other subjects and in total school behavior. Prerequisites: Psyc. 233-234.

Refer to Department of Secondary Education and School Administration for SeEd 371A.

Studio Art Courses

ART 121. Weaving and Textile Design (0, 6), 3 credits.

Introduction to and practice in basic weaves and dressing looms for hand-weaving. Exploration of such fabric treatments as batik, tie-dyeing, stitchery, printing by blocks or screen, and macrame.

ART 122. Metal and Jewelry (0, 6), 3 credits.

An exploration of techniques necessary to execute well-designed objects in metal including forming, repousse, stone setting, metal finishing, enameling and centrifugal casting.

ART 125. Hand-Built Ceramics (0, 6), 3 credits.

Exploration of ceramic hand-building processes and introduction to use of the potter’s wheel.

ART 140. Two-Dimensional Design (0, 6), 3 credits.

Application and appreciation of the principles and elements of design, with emphasis on line, form, color, and texture, as applied to two-dimensional space.

ART 141. Three-Dimensional Design (0, 6), 3 credits.

A course exploring the basic problems in three dimensional design. Prerequisite: Art 140.

ART 150. Drawing (0, 6), 3 credits.

An introductory course composed of problems in landscape, perspective, figure and still-life in several media.

ART 151. Drawing (0, 6), 3 credits.

A continuation of Art 150 involving more complex problems with emphasis on composition and expressive possibilities of a variety of media including ink, pencil, conte, charcoal, and experimental materials. Prerequisite: Art 150.

ART 160. Introductory Painting (0, 6), 3 credits.

Oil painting for students who have had some experience in drawing and design. Registration by permission of the instructor. Does not meet Art major requirement.

ART 235. Sculpture (0, 6), 3 credits.

Problems in three-dimensional form using traditional and modern techniques. Processes of modeling in clay, mold making, casting, carving in wood and stone, and welded metal sculpture are explored. Prerequisite: Art 141.
ART 245. Design Drafting (0, 6), 3 credits.
An introductory course composed of problems in mechanical drawing including isometric and oblique pictorial representation, light construction principles, residential planning, perspective drawing, and presentation techniques.

ART 255. Photography (0, 6), 3 credits.
A creative approach to photography with emphasis on understanding materials and techniques.
(Student must provide a fully manual 35mm camera and a light meter which may be built into the camera or separate.)

ART 321 A, B, C. Weaving and Textiles (0, 6), 3 credits, repeatable to total of 9 credits.
Continued use of frame and floor looms. Emphasis will be on rugs, drafts, and samples. Major projects will be selected by the student with the approval of the instructor. Prerequisite: Art 121.

ART 322 A, B, C. Intermediate Metal and Jewelry (0, 6), 3 credits, repeatable to total of 9 credits.
Continuation of development in metalworking and its skills with emphasis on design and craftsmanship. Prerequisite: Art 122 or equivalent.

ART 340 A, B, C. Interior Design (0, 6), 3 credits, repeatable to total of 9 credits.
Studio projects in residential and contract design problem solving. Emphasis is on presentation of designed interiors in period and contemporary styles. Prerequisite: Art 245.

ART 344. Design Methodology (0, 6), 3 credits.
Exploration and analysis of various ways of solving design problems. Emphasis is placed on examining our changing technology through visual means.

ART 345. Advertising Design (0, 6), 3 credits.
Exposure to calligraphy, typography and the mechanics of graphic production. Problems relating to corporate identity, signage, and editorial art. Emphasis is placed on presentation of professional standards. Prerequisites: Art 140, Art 141.

ART 350 A, B, C. Problems in Drawing (0, 6), 3 credits, repeatable to total of 9 credits.
Problems in life drawing and/or advanced individual problems dealing with the development of creative images. Prerequisites: Art 150, Art 151.

ART 353. Printmaking (0, 6), 3 credits.
An introductory exploration of planographic and intaglio processes. Problems will deal with areas such as stone lithography, etching, aquatint, engraving, soft-ground, color and registration. Prerequisites: Foundation courses in Drawing and Design.

ART 354. Printmaking (0, 6), 3 credits.
An introductory exploration of relief and serigraphic processes. Problems in linoleum and vinyl cuts, woodcuts and engraving, collographs, screen stencils, and color registration. Prerequisites: Foundation courses in Drawing and Design.
ART 355 A, B, C. Intermediate Photography (0, 6), 3 credits, repeatable to total of 9 credits.
A course for the advanced student photographer who wishes to increase his/her visual awareness and visual and technical proficiency through an intensive exploration of personal imagery. Prerequisite: Art 255.

ART 360. Painting (0, 6), 3 credits.
Oil painting and other media with creative and aesthetic considerations of picture structure. Prerequisites: Foundation courses in Drawing and Design.

ART 366 A, B, C. Watercolor (0, 6), 3 credits, repeatable to total of 9 credits.
Study of and practice in transparent and opaque watercolor techniques. Prerequisites: Foundation courses in Drawing and Design.

ART 373. Ceramics (0, 6), 3 credits.
Studio practice in forming, firing, and glazing ceramic ware. Wheel-thrown pottery will be emphasized. Fundamentals of glaze composition will be given in lectures.

ART 434 A, B, C. Advanced Sculpture (0, 6), 3 credits, repeatable to total of 9 credits.
Problems in free standing and relief sculpture with an investigation of metal casting techniques in bronze and other metals. Use of direct metal processes. Constructive approaches to form are also explored. Prerequisites: Art 235, Foundation courses in Drawing and Design.

ART 444 A, B, C. Problems in Design (0, 6), 3 credits, repeatable to total of 9 credits.
Research into design problems related to manufacturing processes, materials, and technology. Laboratory practice in planning and design for mass production. Prerequisite: Art 344.

ART 454 A, B, C. Advanced Printmaking (0, 6), 3 credits, repeatable to total of 9 credits.
Advanced problems in any printmaking process selected by the student with the advice of the instructor. Prerequisite: Art 353 or 354 as appropriate.

ART 460 A, B, C. Painting (0, 6), 3 credits, repeatable to total of 9 credits.
Advanced problems in media selected by the student with the advice of the instructor. Prerequisite: Art 360.

ART 474 A, B, C. Advanced Ceramics (0, 6), 3 credits, repeatable to a total of 9 credits.
Problems in ceramic design with increased attention to the chemical composition of glazes and clays. Prerequisite: Art 373.

Special Courses

ART 394. Magazine Editing and Design, 3 credits.
(See English section for Eng. 394 and for course description.)

ART 490. Special Studies in Art, 1-3 credits each semester.
Independent research or studio practice under faculty supervision. Projected studies must be arranged with the instructors who will direct them. (Offered only with consent of the Department Head.)
ART 499. Honors, 3 credits each semester. Year Course.

ART 501. Workshops in Art, 1-3 credits, repeatable to total of 6 credits.

Concentrated workshops, accompanied by lecture and discussion periods, selected from such areas as painting, sculpture, printmaking, ceramics, art education, photography, crafts, and art history. In studio workshops 30 contact hours will be required for each credit hour.
DEPARTMENT OF BIOLOGY

Dr. Gilbert S. Trelawny, Head of the Department

Professors Davis, Grimm, and Trelawny; Associate Professors E. Fister, W. Jones, Nielsen, Silver, and Winstead; Assistant Professors Bodkin, Cocking, Dendinger, Garrison, M. Gordon, Graves, Heading, and Sellers.

The Department of Biology offers opportunities for study and research in broad areas of biology. Its curriculum is designed to provide fundamental training in the biological sciences for students desiring to enter graduate study, careers in the biological sciences, health fields such as Medicine, Dentistry or Allied Health areas and teaching at the secondary level. The Department also provides courses for general studies and an opportunity for non-majors to choose electives from the discipline.

The Department of Biology maintains a Herbarium in Burruss Hall, Room 303. This facility consists of a collection of dried, pressed plant specimens arranged according to a classification system and are stored in protective steel cabinets. The specimens are representative of the temperate flora of the Mid-Appalachian vascular plants. This depository is available for reference and is the basis for taxonomic, monographic, phytogeographical and floristic studies. Individuals interested in using this facility should contact Mr. Norlyn Bodkin, curator.

The Department offers a four-year, B.S. degree program for a major in Biology and for a major in Biology qualifying for the Secondary Collegiate Professional Certificate. B.A. degree requirements can be met by the addition of 6-14 semester hours in a foreign language and 3 semester hours in philosophy.

The minimum requirement for an undergraduate major in biology is 40 semester hours in biology courses. The biology program will include credit in the following core:

- Bio. 120, General Zoology
- Bio. 130, General Botany
- Bio 250, General Ecology
- Bio 330, Genetics
- Organismal Biology—One course at the 300 level or above.
- Molecular-Physiological Biology—One course at the 300 level or above.

Additional courses in biology must be elected, in consultation with an advisor, to complete the 40 semester hour program. These are free-choice electives and may be chosen to tailor a program according to the particular needs and interests of the student. Alternatively, a student
may select elective credit in biology in an area of concentration. In either case it is important that the core be completed, with the exception of the Molecular-Physiological area, by the end of the Sophomore year.

Credits in the following support courses are required for the biology major: Chem. 101-102 (General Chemistry), and Chem. 234, 235-236 (Organic Chemistry). The mathematics requirement may be met by 6 semester hours selected from Math. 105, 106, 125, 126, 135, 205, 206, 220, 235, 236 or 341.

At least 20 semester hours of the biology program must be earned in upper division (300 or above) biology courses.

A maximum of 6 semester hours of Bio. 325, 6 semester hours of Bio. 495, 2 semester hours of Bio. 496 and 6 semester hours of Bio. 497 may be counted as part of the 40 hour requirement.

Students choosing to minor in Biology are required to complete Bio. 120, General Zoology and Bio. 130, General Botany, and must elect additional biology courses to complete a program of 18 semester hours.

Students interested in a major in biology should consult the Head of the Department, 312 Burruss Hall in order to be assigned to an advisor.

DEPARTMENTAL CONCENTRATIONS

After completion of the Freshman year, students may elect to complete their program beyond the general core and support requirements in an area of concentration. It is recommended that a minimum of 12 semester hours be taken in the concentration. All students who plan to pursue a concentration must apply through the Biology Department office.

Animal Sciences Concentration

Students choosing this concentration should plan a program to include credits from the following: Bio. 310, 316, 320, 357, 485, 515, 517, and 580. Optional support courses include Bio. 270, 290, 325, 350, 404, 497, 545, 551 and 552.

Ecology Concentration

Students electing this concentration should take Bio. 350 and electives chosen from: Bio. 356, 357, 535, 551, and 552. Optional electives are Bio. 280, 385, 310, 325, 404, 485, 497, 515 and 540.
Molecular-Physiological Concentration

A program of study in this concentration should include courses selected from Bio. 355, 480, 485, 517, 550 and 555. Additional recommended courses are Bio. 270, 325, 404, 497 and 545.

Plant Sciences Concentration

Students who pursue this concentration should choose electives from the following: Bio. 385, 315, 340, 355, 356, 555 and 570. Additional support courses include Bio. 325, 350, 404, 497, 545, 551 or 552.

Entomology Concentration

Students interested in this area should apply through the Department Head during their sophomore year to allow for proper advising and scheduling of their coursework. This concentration includes Bio. 310, 415, 525, and 535. Bio. 496 is recommended.

Technical Concentration

A course of study in this area should include courses selected from Bio. 315, 350, 495, 496, 497, Math. 100, 101, 220, or 205-341. Additional recommended courses include Bio. 280, 385, 310, 515 and 540.

MAJOR IN BIOLOGY
(B.S. Degree)

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94 Biology
PROGRAM FOR A MAJOR IN BIOLOGY
QUALIFYING FOR THE SECONDARY
COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

(1) Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
(2) Educ. 360—*Foundations of Curriculum* (junior year).
(3) SeEd. 3711—*Clinical Techniques, Natural Science Methods* (normally in the first semester of the senior year).
(4) Educ. 470—*History and Philosophy of Educational Thought* (senior year)
    or
    Educ. 471—*Values and Teaching* (senior year).
(5) Educ. 480—*Student Teaching* (senior year).
(6) A course in U.S. History (anytime in the program).
(7) Hth. 370—*The School Health Program* (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Description of Courses

**Biology**

BIO. 100. *The Spectrum of Life* (3, 2), 4 credits.
Provides a knowledge of the scientific basis for present concern over biological problems confronting mankind. The characteristics, control, and continuity of life will form the conceptual core of the course. (Not available for major or minor credit.)

BIO. 105. *Introductory Human Biology* (3, 2), 4 credits.
A study of the human organism in the context of contemporary biological thought. Stresses structural, functional and evolutionary concepts. (Not available for major or minor credit.)

BIO. 120. *General Zoology* (2, 4), 4 credits.
Emphasis is on the study of evolutionary development, morphology, physiology, and ecology of representatives of the major phyla of the animal kingdom.

BIO. 130. *General Botany* (2, 4), 4 credits.
A study of the development, structure, and function of plants and their relationships to other organisms.
BIO. 150. Resources Use and Preservation, 3 credits.

An inventory and evaluation of the resources of Virginia and the United States and the proper use thereof. The subject matter will include air, water, minerals, soil, forest, recreation and others as these affect human welfare and prosperity. (Open as an elective to all University students.)

BIO. 210. Human Heredity, 3 credits.

A study of the biological basis of man’s inheritance and genetic diversity, including chromosome behavior and modes of inheritance, interplay of genes and environment, and abnormalities related to genes and chromosomes. Open to all students. (Not available for major credit.)

BIO. 250. General Ecology (2, 1), 3 credits.

The nature of ecosystems will be examined through the discussion of energy flow, population interactions, functional changes during successional development, and the structure of major terrestrial and aquatic communities. Prerequisite: Bio. 100, 120 or 130, or equivalent.

BIO. 270. Human Physiology (2, 2), 3 credits.

Emphasis is placed on the function of the muscular, circulatory, digestive, excretory, endocrine and nervous systems of the human body. Prerequisite: A course in freshman biology or chemistry.

BIO. 280. General Microbiology (2, 4), 4 credits.

A study of the structure and function of micro-organisms and their relationship to Man and the environment. Prerequisite: A course in freshman biology or chemistry.

BIO. 290. Human Anatomy (2, 4), 4 credits.

Emphasis is on the macroscopic structures of the body. A study of the basic plan of the body systems is followed by dissection of the human cadaver with emphasis on the regional approach. Charts, models, three-dimensional slides of dissected cadavers, and the human cadaver are used.

BIO. 300. Invertebrate Zoology (2, 2), 3 credits.

A systematic study of various invertebrate phyla with emphasis on classification, morphology, life histories and phylogeny. Prerequisite: Bio. 120.

BIO. 310. General Entomology (2, 4), 4 credits.

A laboratory and field study of the insects. Morphology, physiology and behavioral aspects will be emphasized. Collection, identification, and preservation of local insects by standard procedure will be a part of the course.

BIO. 315. Introduction to Plant Pathology, 2 credits.

A study of plant diseases, their prevention, identification, control and treatment. Common diseases of both wild and cultivated plants are studied. This course provides practical information for those who attempt to grow plants and are confronted with plant disease problems. Prerequisite: Bio. 130 or consent of instructor.

BIO. 316. Vertebrate Embryology (2, 4), 4 credits.

An introduction to the comparative developmental anatomy of the vertebrates, including the human. Prerequisite: Bio. 120.
BIO. 320. **Comparative Anatomy of Vertebrates** (2, 4), 4 credits.

An integrated course presenting the gross anatomy and embryonic development of vertebrate organ systems in a comparative method.

BIO. 325. **Topics in Biology**, 2-3 credits.

Studies in special areas of biology. May be repeated with change of subject matter.

BIO. 330. **Genetics** (2, 4), 4 credits.

A study of the major principles of biological inheritance through class discussions and laboratory experiments. **Prerequisites:** Bio. 120 and Bio. 130.

BIO. 340. **Morphology and Anatomy of Vascular Plants** (2, 4), 4 credits.

A detailed study of the comparative morphology and anatomy of tracheophytes. **Prerequisite:** Bio. 130.

BIO. 350. **Ecological Techniques** (1, 6), 3 credits.

Field work and ecological techniques as applied to the study of the biotic and abiotic components of freshwater and terrestrial environments. **Prerequisites:** Bio. 120, 130, and 250.

BIO. 355. **Physiology of Vascular Plants** (3, 3), 4 credits.

Function and structure of higher plants including water relations, mineral nutrition, transport phenomena, metabolism, growth and development and selected topics in physiological ecology. **Prerequisites:** Bio. 130, Chem. 235-236. Chem. 236 may be taken concurrently.

BIO. 356. **Plant Ecology** (2, 4), 4 credits.

Distribution and association of plants in relation to their physical and biological environments. Emphasis will be placed on the structure and function of plant communities of different biomes. **Prerequisites:** Bio. 130 and Bio. 250.

BIO. 357. **Animal Ecology** (2, 4), 4 credits.

Study of the fundamental relationships existing between animals and their environment. Emphasis will be placed on the dynamic aspect of ecology and its importance to mankind. The laboratory will consist of group discussion sessions and selected field trips throughout the Shenandoah regions. **Prerequisites:** Bio. 120 and Bio. 250 or equivalent. (Formerly Bio. 510.)

BIO. 360. **Biological Instrumentation** (1, 4), 3 credits.

A study of the principles and techniques in the use of laboratory equipment and apparatus. Some practical work will be included in blood analysis and urinalysis. **Prerequisites:** Chem. 101-102.

BIO. 385. **Taxonomy of Vascular Plants** (2, 3), 3 credits.

A study of identification, nomenclature and classification of vascular plants with emphasis on field investigation. Techniques for identification, collection and preservation will be stressed. Major ecological associations in the mid-Appalachian region will be studied. **Prerequisite:** Bio. 130 or consent of instructor. (Formerly Bio. 285.)

BIO. 403. **History of Biology**, 2 credits.

A survey of the impact of biological thought, progress, and philosophy on the historical development of our civilization.
BIO. 404. Evolution, 3 credits.
An examination of the place of theoretical thought in biology. The concepts of phylegetic relationships and the mechanisms of organic change as expressed through the principles of organic evolution will be stressed. Prerequisite: Bio. 330.

BIO. 415. Immature Insects (2, 4), 4 credits.
Immature forms of insects representing the major orders will be studied for recognition purposes. Life cycles, habitats and their economic importance will be included.

BIO. 425. Invertebrate Physiology (3, 3), 4 credits.
Interrelationships of form and function of invertebrate animals. Principles of physiological dynamics including osmoregulation, respiration, hemodynamics, digestion, and control of organ interaction will be covered. Prerequisites: Bio. 120 and Chem. 236.

BIO. 480. Molecular Biology (2, 4), 4 credits.
A study of cellular constituents and cellular genetics at the molecular level. Prerequisites: Chem. 235-236. Chem. 236 may be taken concurrently.

BIO. 485. Comparative Animal Physiology (2, 4), 4 credits.
Physiological principles involved in adaptations of animals to their environment. Emphasis in the laboratory on experimental methods utilized to study adaptive mechanisms. Prerequisites: Chem. 235 and Bio. 120. Bio. 250 is recommended.

BIO. 495. BioTechniques, 1 credit, repeatable with change of subject matter to a total of 6 credits.
Emphasis is placed on theory, methodology and the development of manipulative abilities. Students must notify the Biology Office of their interest the semester before registration.

BIO. 496. Research Literature, 1 credit, repeatable to a total of 2 credits.
A systematic review and study of the research literature in a selected field of biology. Proposal for study must be approved by Sponsor and Department Head in the semester before registration.

BIO. 497A, B, C. Problems in Biology, 2-3 credits, repeatable to a total of 6 credits.
Research in a selected area of biology as arranged with sponsor. Research outline must be approved by Sponsor and Department Head in the semester before registration. (Formerly Bio. 497-498.)

BIO. 499. Honors in Biology, 6 credits.

BIO. 501. Workshop in Biology, (summer; 0, 4), 1-3 credits.
Concentrated study in particular areas of biology. Up to three credit hours may be counted toward an undergraduate major or minor in biology.

BIO. 506. Research Publication Methods (0, 2), 1 credit.
Bibliographic and graphic methods, including microscopy, photomicrography, scientific drawing and writing, and preparation of manuscripts. For graduate students conducting thesis research. By permission of instructor only.

BIO. 515. Parasitology (2, 4), 4 credits.
A study of the origin and nature of parasitism as illustrated by representative animal parasites. Emphasis is on species of medical and economic importance.
BIO. 517. Developmental Biology (2, 4), 4 credits.
Physiological and biochemical aspects of animal development will be emphasized in lecture. Laboratory periods will be used for experimental work, literature reviews, and discussions. Prerequisites: Bio. 480. Bio. 316 is recommended.

BIO. 525. Medical Entomology (2, 4), 4 credits.
A study of the arthropods that parasitize man or serve as vectors of human pathogens. Morphological features, distribution, life histories and control methods will be emphasized.

BIO. 535. Insect Ecology (2, 4), 4 credits.
The environmental relations of insects, including insect development, habits, distribution and abundance. Emphasis is on field studies.

BIO. 540. Public Health Microbiology (2, 4), 4 credits.
A study of infectious diseases, epidemiology and the interactions of agent and host. The microbiology of water, sewage, air, and foods is covered with respect to the dissemination of disease agents and methods of their control.

BIO. 545. Cytology (2, 4), 4 credits.
A study of the organization and components of cells, relating structure to function. Laboratory study will include cytoplasmic organelles as well as nuclear and chromosomal morphology. Prerequisite: Bio. 330.

BIO. 550. Cellular Physiology (2, 4), 4 credits.
A study of physiochemical relationships as they apply to cell function. Prerequisites: Chem. 235-236.

BIO. 551. Ecosystem and Community Dynamics (3, 3), 4 credits.
Quantitative studies of plant and animal communities and their functional interactions with the environment. The ecosystem will be examined as a dynamic unit comprising both objects and functions. Prerequisites: Bio. 250, 350 or equivalent.

The structure, distribution and interaction of plant and animal populations will be examined. Population growth patterns, regulatory mechanisms and differentiation in response to the environment will be considered. Prerequisites: Bio. 250, 330, 350 or equivalent.

BIO. 555. Advanced Plant Physiology (2, 4), 4 credits.
The physiology of higher plant cells and organisms emphasizing biophysical and biochemical aspects of plant functioning including water relations, mineral nutrition, transport phenomena, and metabolism. Prerequisites: Bio. 130; a course in physiology and Chem. 235-236, or equivalent.

BIO. 570. Morphology of Non-Vascular Plants (2, 4), 4 credits.
Comparative morphology, ecology, and taxonomy of representative algae, fungi, bryophytes. Prerequisite: Bio. 130.

BIO. 580. Vertebrate Histology (2, 4), 4 credits.
A comparative study of the microscopic anatomy of vertebrates. Prerequisites: Bio. 120 and either Bio. 316 or Bio. 320.

Biology 99
DEPARTMENT OF CHEMISTRY

Dr. B. A. DeGraff, Head of the Department

Professors DeGraff and Simmons; Associate Professors Atkins, Crowther, and Palocsay; Assistant Professors Leary and Voige.

The Department of Chemistry offers programs designed to provide the student with the theoretical and practical instruction in chemistry and related areas leading to careers in chemistry, medicine, dentistry, and paramedical areas, forensic sciences, chemical engineering and other technology based careers. The Department also recognizes its responsibility in providing courses for the non-scientist who needs to make effective use of chemistry in his or her chosen career.

PROFESSIONAL PROGRAM

This program is designed to meet the needs of students who expect their careers to be based directly on chemistry or who expect to enter a professional school such as dentistry or medicine. The minimum requirement for a professional major in chemistry is 40 semester hours in chemistry and 18 semester hours in specified related studies. Studies in chemistry will include the following core:

- General Chemistry .................................................. 8 cr. hrs.
- Organic Chemistry Laboratory .............................. 2 cr. hrs.
- Organic Chemistry Lecture ...................................... 6 cr. hrs.
- Inorganic Chemistry ............................................... 3 cr. hrs.
- Analytical Chemistry ........................................... 8 cr. hrs.
- Literature and Seminar .......................................... 1 cr. hr.
- Physical Chemistry Lecture .................................... 3 cr. hrs.
- Physical Chemistry Laboratory ............................. 1 cr. hr.

In addition, eight hours of chemistry or other approved electives should be selected to match the student’s needs and interests.

CHEMISTRY-BUSINESS PROGRAM (CHEM-COMMERCE)

This program is designed for the business oriented chemistry student preparing for careers such as patent law, technical sales, technical service, and related areas. The program is structured around a chemistry major and a business minor. Both components can be tailored to the student’s needs and interests and special advisors are designated from the two departments.
APPLIED CHEMISTRY/CHEMICAL ENGINEERING

A special program is available to students interested in applied chemistry and/or chemical engineering through a cooperative program with V.P.I. & S.U. (Blacksburg). Students in this program complete the regular chemistry core courses and other university requirements and then spend their senior year at V.P.I. & S.U. in the Chemical Engineering Department. At the completion of an approved three quarter program of Chemical Engineering studies, the student graduates from James Madison University with a B.S. degree in Chemistry with a special notation on the transcript regarding the Chemical Engineering experience. The program is so structured that a student wishing to pursue an M.S. in Chemical Engineering can receive a B.S. in Chemistry from James Madison University and an M.S. in Chemical Engineering from V.P.I. & S.U. with a substantial savings of time.

CHEMISTRY MINOR

The requirements for a chemistry minor are 24 semester hours in chemistry distributed as follows:

Chem. 101-102
Chem. 237, or Chem. 234, 235, 236
Chem. 356
Chem. 484, 485, or Chem. 485, 486, 487

And, approved elective such as Chem. 290, Chem. 337 or Chem. 355.

In order to complete this program, prerequisite courses in mathematics and physics are required.

Freshmen who intend to major in chemistry take a placement test in mathematics to determine in which mathematics course they should enroll. Entering freshmen with a good background in high school chemistry are encouraged to take the department’s exemption exam in general chemistry. Students interested in the programs offered by the Chemistry Department should consult the Head of the Department, Miller Hall.

TYPICAL PROGRAM FOR A MAJOR IN CHEMISTRY
(B.S. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Chem. 101-102</td>
<td>8</td>
<td>History</td>
<td>6</td>
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<td>Eng. 101-102</td>
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<td>Math. 236</td>
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Chemistry 101
Freshman Year (cont'd)  

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<tr>
<td>Comm. 200, 222 or 226</td>
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<tr>
<td>Electives</td>
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Sophomore Year (cont'd)  

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<tr>
<td>Chem. 290</td>
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<tr>
<td>Chem. 234, 235, 236</td>
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Junior Year  

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<td>Chem. 450</td>
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<td>Social Science</td>
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<td>Electives</td>
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Credit  

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Senior Year  

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PROGRAM FOR A MAJOR IN CHEMISTRY QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

1. Psyc. 233 and 234—Human Growth and Development (sophomore year).
2. Educ. 360—Foundations of Curriculum (junior year).
3. SeEd. 3711—Natural Science Methods (normally in the first semester of the senior year).
4. Educ. 470—History and Philosophy of Educational Thought (senior year)
   or
   Educ. 471—Values and Teaching (senior year).
5. Educ. 480—Student Teaching (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—The School Health Program (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Description of Courses

Chemistry

CHEM. 101-102. General Chemistry (3, 3), 4 credits each semester.

Fundamental chemical principles are examined in terms of modern theories, laws, and applications of chemistry. The course is designed to provide the student with a chem-
Chemical background to be utilized in other fields of work as well as for further work in Chemistry.

**CHEM. 103.** Special General Chemistry Laboratory (1, 3), 2 credits.

An enriched laboratory course which includes special topics and experiments not presented in the regular Chem. 102 laboratory. Co-requisites: Chem. 102 (lecture) and permission of instructor.

**CHEM. 110.** Concepts of Chemistry (3, 2), 4 credits.

Some of the fundamental principles, laws and applications of chemistry are considered. Material is selected from the areas of inorganic chemistry, organic chemistry, and biochemistry. (This is a terminal course in chemistry and is intended for students who do not plan to enroll in other chemistry courses.)

**CHEM. 121-122.** Chemistry for Allied Health Sciences (3, 2), 4 credits each semester.

A course in fundamental chemical principles based on modern concepts of matter. This course is designed to acquaint students majoring in pre-nursing, pre-physical therapy, dietetics, and pre-public health with topics in inorganic, organic, and biochemistry.

**CHEM. 234.** Organic Chemistry Laboratory (0, 4), 2 credits.

This course will present laboratory techniques and experiments associated with organic chemistry, including an introduction to synthesis, spectroscopic methods, chromatographic techniques, and some qualitative organic analysis. Prerequisite: Chem. 235.

**CHEM. 235-236.** Organic Chemistry Lecture, 3 credits each semester.

The chemistry of organic compounds is studied in the light of modern theories of their structure and behavior, with emphasis on spectroscopic and other modern methods of structure determination. Prerequisite: Chem. 102.

**CHEM. 237.** Organic Chemistry (3, 3), 4 credits.

An introduction to the study of organic compounds with emphasis on the chemistry of functional groups, including methods of preparation and interconversions. The laboratory work will include training in the techniques of organic chemistry, preparation of compounds, and some organic qualitative analysis. Prerequisite: Chem. 102 or 122.

**CHEM. 238.** Biochemistry (3, 3), 4 credits.

A brief survey of the principal constituents of living cells—proteins, carbohydrates, lipids, and nucleic acids—with emphasis on their synthesis and transformations in vivo. Intermediary metabolism and protein replication will be stressed. The laboratory work will comprise experiments demonstrating some of the pertinent reactions, including those of analytical value. Co- or prerequisite: Chem. 236 or Chem. 237.

**CHEM. 241.** Electronics (2, 4), 4 credits.

For course description, see Phys. 241.

**CHEM. 290.** Inorganic Chemistry (2, 3), 3 credits.

A survey of the chemistry of the elements and modern theories of bonding. The laboratory will stress synthesis and identification of selected inorganic compounds. Prerequisite: Chem. 102.

**CHEM. 337.** Intermediate Biochemistry I, 3 credits.

An introduction to the molecules and chemical reactions of living systems. Structure and function of important classes of biomolecules are explored, and the relationship of
structure to function is stressed. Basic metabolic sequences are discussed. Prerequisite: Chem. 236 or permission of instructor. (Formerly Chem. 439.)

CHEM. 338. Intermediate Biochemistry II, 3 credits.
A continuation of Chem. 337, including metabolic regulation, protein biosynthesis, analytical methods, and isolation of biomolecules. Prerequisite: Chem. 337.

CHEM. 339. Biochemistry Laboratory (0, 5), 2 credits.
An introduction to laboratory techniques and experimental approaches associated with modern biochemistry. Isolation and characterization of enzymes and other biomolecules are emphasized. Prerequisite: Chem. 337.

CHEM. 355. Introduction to Geochemistry (2, 2), 3 credits.
For course description, see Geol. 355.

CHEM. 356. Analytical Chemistry (2, 4), 4 credits.
The total analysis concept is introduced and developed. This framework encompasses the areas of experiment design, sample collection and treatment, and statistical evaluation of results, as well as standard analysis techniques.

CHEM. 357. Instrumental Analysis (2, 4), 4 credits.
This course emphasizes the application of instrumental techniques to the quantitative determination of chemical composition. Both instrument theory and practical applications are presented. Prerequisite: Chem. 356.

CHEM. 400. Selected Topics in Chemistry, 1-3 credits each semester.
This course is designed to allow an in-depth study of specific topics in chemistry selected according to student and staff interest.

CHEM. 423. Advanced Laboratory Techniques (1, 4), 3 credits.
Advanced laboratory techniques designed to apply instrumental methods to synthetic and isolation problems. The syntheses will encompass organic, inorganic and biochemical topics. New and sophisticated laboratory methods and techniques will be explored. Prerequisite: Chem. 357 or permission of instructor.

CHEM. 450-451. Literature and Seminar, 1 credit each semester.
The course consists of instruction in methods of abstracting specific information from the whole body of chemical literature. The literature methods will be practically applied in the presentation of a seminar on a selected topic in chemistry. Prerequisite: Permission of instructor.

CHEM. 484. Applied Physical Chemistry Laboratory (0, 3), 1 credit.
A laboratory course which emphasizes the applied experimental aspects of physical chemistry. Pre- or co-requisite: Chem. 485.

CHEM. 485. Physical Chemistry I, 3 credits.
A study of thermodynamics, solutions, kinetics, and macromolecules with applications to chemical and biological problems. Prerequisite: Math. 205 or Math. 235.

CHEM. 486. Physical Chemistry II, 3 credits.
A study of atomic and molecular energy levels and structure as interpreted by quantum theory. Prerequisite: Math. 236.
CHEM. 487. *Physical Chemistry Laboratory* (1, 3), 2 credits.

A laboratory course which emphasizes the application of various physical measurement techniques as a means of obtaining data to test fundamental chemical theory. *Pre-or co-requisite: Chem. 485.*

CHEM. 490. *Inorganic Chemistry*, 3 credits.

A study of selected topics in the field of advanced inorganic chemistry. *Co-requisite: Chem. 485.*

CHEM. 497-498. *Problems in Chemistry*, 1-3 credits each semester.

An undergraduate research course in one of the fields of chemistry. (Open, with permission of the department, to advanced students in the College who have adequate preparation.)

CHEM. 499. *Honors*, 6 credits. Year Course.

CHEM. 501. *Workshop in Chemistry* (2, 2), 3 credits, summer only.

This course will deal in depth with an area of chemistry that is of topical and current interest. Topics will be selected from active research areas on the basis of their potential impact on society. This course may not be used for credit toward a major or minor in Chemistry.


An advanced study of the theory of organic chemistry as applied to chemical reactions and synthetic methods. Such topics as reaction mechanisms, spectroscopy, and stereochemistry will be included. *Prerequisite: One year of organic chemistry.*
DEPARTMENT OF COMMUNICATION ARTS

Dr. Donald L. McConkey, Head of the Department

Professors Finney and McConkey; Associate Professors Arthur, Goodyear, King, and Smith; Assistant Professors Frantz, Fuller, Hall, Lyndrup, and Neckowitz; Instructors Grayson, Holp, Kirklund, Morello, Respress, Soenksen, Warner, and Wendelken.

Major areas of concentration are: Speech Communication, Theatre, Radio/Television/Film, and Journalism.

Courses in the Department of Communication Arts are designed for four classes of students: (a) those who plan to pursue careers in one of the fields of communication; (b) those who have career plans which may be aided by study in the areas of communication; (c) those who plan to do graduate work; and (d) those who intend to teach in secondary schools.

The minimum requirement for a major in Communication Arts is 30 semester hours beyond the General Studies requirement. A minor in Communication Arts will include 18 semester hours, subject to the approval of the Head of the Department. Students should refer to the catalog for a detailed listing of the General Studies requirements which must be completed in addition to department requirements.

All majors in the Department of Communication Arts will be required to complete a core curriculum of 12 semester hours with the following four courses: Comm. 210 (Process of Human Communication), Comm. 252 (Theatre in Society), Comm. 271 (Introduction to Radio and Television), Comm. 285 (Introduction to Journalism). Students majoring in the Department of Communication Arts work toward the B.A. or the B.S. degree.

DEPARTMENT CONCENTRATIONS

After completing the core curriculum in Communication, majors in the department may pursue either a general concentration which cuts across all areas, or they may elect to concentrate in a specific area of the department. Majors will be advised to select specific courses providing a broad background of understanding and experience in the various communication media: speech, communication theory, theatre, radio, television, film, and journalism. Certain courses offered by the Art, English, Business, Education, and Speech Pathology and Audiology Departments relating to communication media, may be elected to complete the major, subject to the approval of the Head of the Department of Communication Arts.
SPEECH COMMUNICATION CONCENTRATION

This concentration includes: Rhetoric and Public Address, Organizational Communication, Communication Theory, Communication Arts Education, and Oral Interpretation. Depending upon specific interests, students pursuing a Speech Communication concentration should elect, beyond the core courses, a minimum of 18 credit hours from Comm. 211 (Oral Interpretation), Comm. 212 (Voice and Diction), Comm. 225 (Argumentation and Debate), Comm. 227 (Problem Solving Communication), Comm. 305 (Communication Codes), Comm. 311 (Advanced Oral Interpretation), Comm. 314 (Phonetics), Comm. 326 (Persuasive Speech), Comm. 329 (Business and Professional Speaking), Comm. 330 (Organizational Communication), Comm. 335 (Free Speech in America), Comm. 421 (Survey of Rhetorical Theory and Criticism), Comm. 422 (Contemporary Rhetoric), Comm. 427 (Advanced Studies in Group Communication), Comm. 500 (Seminar in Communication), Comm. 520 (Seminar in Rhetoric and Public Address), and related courses in the department and in other departments to reflect specific individual interests or career goals.

THEATRE CONCENTRATION

Students pursuing a theatre concentration should elect, beyond the core courses, a minimum of 18 credit hours, which may include Comm. 251 (Basic Acting), Comm. 255 (Technical Theatre), Comm. 341 (Costume Design), Comm. 351 (Acting), and either Comm. 443 or 444 (Theatre History I and II). Other recommended courses are Comm. 212 (Voice and Diction), Comm. 241 (Stage Make-Up), Comm. 342 (Survey of Costume Fashion and Manners), Comm. 352 (Directing for the Theatre), Comm. 356 (Scene Design), Comm. 358 (Stage Lighting), Comm. 441 and 442 (Dramatic Literature and Theory), Comm. 452 (Advanced Acting), Comm. 540 (Seminar in Theatre), Comm. 548 (Experimental Theatre), and related courses in the department and in other departments, to reflect specific individual interests or career goals.

RADIO/TELEVISION/FILM CONCENTRATION

Students pursuing a Radio/Television/Film concentration should elect, beyond required department core courses, a minimum of 18 credit hours from Comm. 281 (News Writing), Comm. 365 (Radio Production), Comm. 366 (Radio/Television/Film Performance), Comm. 368 (Broadcast Sales and Promotion), Comm. 372 (Television Production), Comm. 374 (Television Directing), Comm. 375 (Basic Film Production), Comm. 378 (News and Public Affairs), Comm. 379 (Public Broadcasting), Comm. 461 (Broadcast Management), Comm. 465 (Advanced Radio Production), Comm. 468 (Broadcast and Cablecast Regulation), Comm. 472 (Advanced Television Production), Comm. 474 (The Tele-
vision Producer), Comm. 477 (Technological Development of the Motion Picture), Comm. 478 (Documentary in Film and Television), Comm. 560 (Seminar in Broadcast Media), and related courses in the department and other departments to reflect specific individual interests or career goals.

JOURNALISM CONCENTRATION

Students pursuing a journalism concentration should elect, beyond the required department core courses, a minimum of 18 credit hours from Comm. 281 (News Writing), Comm. 282 (News Editing), Comm. 284 (Photo-Journalism), Comm. 378 (News and Public Affairs), Comm. 381 (Advanced News Writing), Comm. 382 (Advanced News Editing), Comm. 384 (Advanced Photo-Journalism), Comm. 385 (Mass Communication and Society), Comm. 387 (History of American Journalism), Comm. 388 (Journalism and the Law), Comm. 481 (Feature Writing), Comm. 483 (Editorials and the Editorial Page), Comm. 580 (Seminar in Journalism), and related courses to reflect individual interests or career goals.

GENERAL STUDIES

The Department offers Comm. 200 (Oral Communication), Comm. 222 (Public Speaking), and Comm. 226 (Small Group Communication) as options for the college General Studies Oral Communication requirement, and Comm. 250 (Introduction to Theatre) as an option for the college General Studies Fine Arts requirement. Department courses elected to fulfill General Studies will not apply to Department Major or Minor programs. General Studies course options not elected as General Studies requirements will also not be applicable to Department Major or Minor programs but may be used as elective credits.

PROGRAM FOR SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE
(DRAMATICS, JOURNALISM, SPEECH)

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

(1) Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
(2) Educ. 360—*Foundations of Curriculum* (junior year).
(3) SeEd. 371J—*Clinical Techniques, Communication Arts Methods* (normally in the first semester of the senior year).
(4) Educ. 470—History and Philosophy of Educational Thought (senior year)

or

Educ. 471—Values and Teaching (senior year).

(5) Educ. 480—Student Teaching (senior year).

(6) A course in U.S. History (anytime in the program).

(7) Hth. 370—The School Health Program (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

DEPARTMENT CO-CURRICULAR ACTIVITIES

Majors, as well as interested non-majors, are invited and encouraged to enroll and participate in the co-curricular activities of the Department of Communication Arts. Credit is available to both majors and non-majors by enrolling in the various practica and applied courses offered in broadcasting, theatre, forensics and journalism. Any student may participate in debate and forensic activities: The Madison College Theatre and Stratford Players, Radio Station WMRA-FM, television production, work in area broadcasting outlets, and work on the college newspaper, The Breeze. Further information on any of these activities may be obtained by contacting the various faculty members responsible for these co-curricular activities, through the department office in Zirkle House.

Students interested in the programs offered by the Department of Communication Arts should consult Dr. Donald L. McConkey, Zirkle House.

Description of Courses

Communication Arts

COMM. 200. Oral Communication, 3 credits.

Study of the basic processes of oral communication. Emphasis upon the elements of oral composition, analysis of subject matter, speech purposes as related to audiences, and modes of delivery. Consideration of the behavioral characteristics of speakers and listeners, and of the various forms of oral communication.


Study of human communication as a behavioral process employing both verbal and nonverbal modes of interaction. Emphasis on studies of learning theory, motivation, language, meaning, and social interaction as they apply to human communication. Consideration of the applied use of communication studies in personal, business, social and professional endeavors.

COMM. 211. Oral Interpretation, 3 credits.

Study of various forms of literature from the intellectual and the emotional viewpoints. Emphasis upon imagery, denotation, connotation, and motivation. Consideration
of techniques relating to the vocal expression of meaning and emotion. (Formerly Comm. 245.)

COMM. 212. Voice and Diction, 3 credits.
Study of the voice as an instrument of communication. Consideration of normal speech patterns, with emphasis on voice production and the articulation of sounds. Application and practice through selected readings, tape recordings, and class evaluations.

COMM. 220. Practicum—Forensics, 1 credit.
Students who participate in co-curricular forensic activities may receive 1 hour credit per semester. May be repeated during freshman and sophomore years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 222. Public Speaking, 3 credits.
Study of the creative and practical skills of public speaking. Emphasis on student practice and analysis based on measurable objectives and specific speech purposes. Consideration given to how to design and deliver effective public speeches of various types for various occasions and purposes by practice and study of speech content, organization and delivery.

COMM. 225. Argumentation and Debate, 3 credits.
Study of the techniques and principles of formal argument and advocacy. Emphasis upon developing, presenting, and defending a position on controversial questions. Consideration of various theories of argumentation and forms of debate.

COMM. 226. Small Group Communication, 3 credits.
Study of the process of human communication and interpersonal interaction in small groups. Emphasis upon group methods such as roles, norms, leadership, and decision making. Consideration of the behavioral and the rhetorical approaches to the study of group communication.

COMM. 227. Problem Solving Communication, 3 credits.
Study of the process of human communication associated with the solving of problems. Emphasis on the small group as a problem solving entity. Consideration of specific forces, factors, and techniques that influence problem solving effectiveness. Not available to students with credit for Comm. 226.

COMM. 240. Practicum—Theatre, 1 credit.
Students who participate in co-curricular theatre activities may receive 1 hour credit per semester. May be repeated during freshman and sophomore years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 241. Stage Make-Up, 1 credit.
Study of the theory and practice of theatrical make-up for stage, television and film. Consideration given to design and application of the various types of make-up: straight, character, fantastic, and clown. Emphasis on the use of make-up as an aid to characterization.

COMM. 250. Introduction to Theatre, 3 credits.
Study of the drama as an art form. Emphasis upon introducing students to the basic processes relating to the board spectrum of the theatre. Consideration of dramatic litera-
ture in its historical context, and as it relates to elements of staging, design, costume, lighting and make-up.

COMM. 251. *Basic Acting*, 3 credits.
A study of basic acting as a performance experience. Emphasis upon Theatre Games and improvisation with the aim of improving the student’s presentational abilities.

Study of theatre within broad social and cultural contexts, including examination of drama in contemporary society. Emphasis on how theatre influences and is influenced by the society in which it exists. Consideration of theatrical art output within specifically selected societies.

Study of the technical aspects of stage production. Emphasis upon practical experience in the use of stage and shop facilities. Consideration of the physical theatre physical stage, construction, painting and rigging of scenery, as applied to theatrical and television production.

COMM. 260. *Practicum—Radio/Television/Film*, 1 credit.
Students who participate in co-curricular radio/television/film activities may receive 1 hour credit per semester. May be repeated during freshman and sophomore years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 271. *Introduction to Radio and Television*, 3 credits.
Study of radio and television designed to introduce the student to the broadcast industry. Emphasis upon history and development regulatory, and social aspects and programming and production principles. Consideration of both educational and commercial broadcasting.

COMM. 280. *Practicum—Journalism*, 1 credit.
Students who participate in co-curricular journalism activities may receive 1 hour credit per semester. May be repeated during freshman and sophomore years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirement. Limit—4 hours.

COMM. 281. *News Writing*, 3 credits.
Study of the fundamentals of news writing, including news gathering techniques and modern news style. Emphasis upon day-to-day coverage of meetings, events and breaking news stories.

COMM. 282. *News Editing*, 3 credits.

COMM. 284. *Photo-Journalism*, 3 credits.
Study of news photography with emphasis upon practical application. Students must provide their own camera.

COMM. 285. *Introduction to Journalism*, 3 credits.
Study of the development and role of the newspaper in America. Emphasis upon contemporary newspaper techniques and problems. Consideration of the basic news story, interpretive reporting, and the function of the editorial page.

*Communication Arts* 111
COMM. 303. *Topics in Communication Arts*, 1-3 credits, repeatable to 6 credits.  
Study of current topics and issues in the Communication Arts. Emphasis upon contemporary themes of immediate concern. (Offered only with consent of Instructor).

COMM. 305. *Communication Codes*, 3 credits.  
Study of words, their meanings, and their effect upon human behavior. Emphasis upon theories of meaning and their application. Consideration of the research and writings of leading semanticists.

COMM. 311. *Advanced Oral Interpretation*, 3 credits.  
An advanced study of the theory of interpretation. Emphasis upon interpretation as a fine art. Consideration of the intellectual and emotional aspects of interpretive reading. Prerequisite: Comm. 211. (Formerly Comm. 346.)

COMM. 314. *Phonetics*, 3 credits.  

COMM. 320. *Practicum—Forensics*, 1 credit.  
Students who participate in co-curricular forensic activities may receive 1 hour credit per semester. May be repeated during junior and senior years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 326. *Persuasive Speech*, 3 credits.  
Study of oral communication as a determinant of attitudinal and behavioral change. Emphasis upon the various kinds of artistic and non-artistic proofs as they apply to human motivation. Consideration of the application of behavioral research findings to persuasion.

An advanced study of the techniques of effective oral communication. Emphasis upon the various communication problems unique to business and professional communication. Consideration of the communicative skills and the roles in society which should be assumed by the communicator.

COMM. 330. *Organizational Communication*, 3 credits.  
Study of the theories and principles of communication within organizations. Emphasis on description and analysis of formal and informal structures, communication patterns and networks, and interactions and hierarchies. Consideration of business, professional, charitable, political, and social organizations.

COMM. 335. *Free Speech in America*, 3 credits.  
A study of the evolution of freedom of speech in America from colonial times to the present day. Emphasis on the major periods of development and on the role of courts in defining freedom of speech. Special consideration of contemporary freedom of speech controversies.

Students who participate in co-curricular theatre activities may receive 1 hour credit per semester. May be repeated during junior and senior years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

112 Communication Arts
COMM. 341. Costume Design, 3 credits.

The study of basic design and construction techniques of stage costumes. Emphasis upon costuming in terms of the total production concept, including the directorial approach, the setting, and the lighting design. Consideration of the process of costuming a theatrical production, from first production meetings to opening night.

COMM. 342. Survey of Costume Fashion and Manners, 3 credits.

Study of fashion through the ages as it pertains to stage costumes and stage movement. Emphasis on clothing, hats, footwear, accessories, and their proper use. Consideration given to the enhancement of a theatrical production through use of fashion and manners.

COMM. 351. Acting, 3 credits.

Study of the fundamental theories and methods of acting. Emphasis upon laboratory experience in the preparation of scenes. Consideration of various acting techniques through performance with maximum individual "on stage" instruction. Prerequisite: Comm. 251, or permission of instructor.

COMM. 352. Directing for the Theatre, 3 credits.

Study of the principles, problems, and techniques of play direction. Emphasis upon historical and modern theories. Consideration of techniques of direction as applied to the stage and to cinematography. Prerequisite: Comm. 251 and either Comm. 250 or Comm. 252.

COMM. 356. Scene Design, 3 credits.

Study and analysis of the visual elements of theatrical production. Emphasis on the principles and elements of design, drafting, and rendering. Consideration of the aesthetics of stage design through specific applied projects. Prerequisite: Comm. 255.

COMM. 358. Stage Lighting, 3 credits.

Study and analysis of stage lighting. Consideration given to basic elements of electricity, electrical control and circuitry, reflection, refraction, and color. Emphasis on the lighting design, and aesthetics of a theatrical production. Prerequisite: Comm. 255.

COMM. 360. Practicum—Radio/Television/Film, 1 credit.

Students who participate in co-curricular radio/television/film activities may receive 1 hour credit per semester. May be repeated during junior and senior years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 365. Radio Production, 3 credits.

Study of the principles and techniques of radio programming. Emphasis upon the application of principles to student production projects. Consideration of program development, staffing, equipment, and special effects. Prerequisite: Comm. 271.

COMM. 366. Radio/Television/Film Performance, 3 credits.

Study of the principles and techniques of performing on radio, television and in films. Emphasis upon reading copy, acting, and interviewing. Consideration of appropriate adaptations of these forms of performance to the characteristics of each medium. Prerequisite: Comm. 251, or permission of instructor.

COMM. 368. Broadcast Sales and Promotion, 3 credits.

Study of the role of sales and promotion in commercial broadcasting. Emphasis upon concepts and techniques in selling time and promoting sales. Consideration of resources, regulatory agencies and other factors affecting radio/television time sales.
COMM. 372. Television Production, 3 credits.
Study of the principles and techniques of television production. Emphasis upon the application of principles for the creation, production, and presentation of closed and open-circuit telecasts. Consideration of the utilization of art, graphics, slides, films, and broadcasting equipment. Prerequisite: Comm. 271.

COMM. 374. Television Directing, 3 credits.
Study of the principles and procedures involved in directing the television program. Consideration given to analysis and interpretation of visual and aural concepts. Emphasis upon the theory of directing and its application to the total program design. Prerequisite: Comm. 372.

COMM. 375. Basic Film Production, 3 credits.
Study of the principles and procedures of producing film. Emphasis on concepts, problems, techniques, and tools of film making. Consideration given to the motion picture as a medium of communication. Prerequisite: Comm. 372 or permission of instructor.

Study of the role and functions of news and public affairs in broadcasting. Consideration of the relationship between broadcast journalism and the printed media. Emphasis upon writing and delivering news for broadcast. Prerequisite: Comm. 281, or permission of instructor.

COMM. 379. Public Broadcasting, 3 credits.
Study of educational, instructional, and public-affairs programming for radio and television. Emphasis upon the theory and practice of public broadcasting. Consideration of the criteria, techniques, and uses of public broadcast programming.

COMM. 380. Practicum—Journalism, 1 credit.
Students who participate in co-curricular journalism activities may receive 1 hour credit per semester. May be repeated during junior and senior years. No student may enroll in more than one Practicum per semester. Majors may apply a maximum of 4 hours Practicum credit toward meeting major requirements. Limit—4 hours.

COMM. 381. Advanced News Writing, 3 credits.
Advanced study of news writing and news gathering techniques. Emphasis upon in-depth and investigative stories. Prerequisite: Comm. 281, or permission of instructor.

COMM. 382. Advanced News Editing, 3 credits.
Advanced study of news editing and news editing techniques. Emphasis upon layout and design, picture editing, and working with wire copy. Prerequisite: Comm. 282, or permission of instructor.

COMM. 384. Advanced Photo-Journalism, 3 credits.
Advanced study of news photography with emphasis on covering news assignments and illustrating feature articles. Advanced darkroom techniques and color photography will also be considered as they apply to journalism. Students must provide their own cameras. Prerequisite: Comm. 284, or permission of instructor.

COMM. 385. Mass Communication and Society, 3 credits.
Study of the nature of mass communication and the role of the mass media in society. Emphasis upon contemporary problems and issues of broadcasting, film, and the press.

Communication Arts
COMM. 387. History of American Journalism, 3 credits.

Study of the history and development of the press in relation to American social, economic and political life. Emphasis on early attitudes that led to the establishment of a free press in the United States and the nature of press freedom as it has evolved in the 200 years since the nation's founding. Prerequisite: Sophomore standing, or permission of instructor.

COMM. 388. Journalism and the Law, 3 credits.

Principles and case studies in communications law, constitutional guarantees, libel, privilege, privacy, contempt, copyright and governmental regulatory agencies. Emphasis on recent cases and their effects on journalism.

COMM. 390. Directed Projects, 3 credits, repeatable to 6 credits.

Supervised projects or internships related to the study of any one of the Communication Arts. Credit given for original individual or group programs beyond the Department's usual co-curricular activities. A suitable completed project or report is required before credit can be awarded. (Offered only with consent of the Head of the Department.)

COMM. 421. Survey of Rhetorical Theory and Criticism, 3 credits.

Study of the major rhetorical theorists from classical Greece to the present day. Emphasis upon the various periods of rhetorical development and upon the application of theory to practical criticism of public speaking. Consideration of modern-day departures from classical doctrines.

COMM. 422. Contemporary Rhetoric, 3 credits.

Study of the communicative techniques evident in contemporary American political and social movements. Consideration of the evolution and development of those movements with emphasis upon the critical analysis of major orators and significant speeches. (Formerly Comm. 336.)

COMM. 427. Advanced Studies in Group Communication, 3 credits.

Study of the important research findings relevant to group communication. Emphasis on a detailed and thorough investigation of major variables in group communication. Consideration of the means for conducting small group communication research. Prerequisite: Comm. 226 or Comm. 227, or permission of instructor.

COMM. 441. Dramatic Literature and Theory, 3 credits.

Classical and Neoclassical theatre art: The study of the theoretical basis for theatre aesthetics and an examination of plays as examples of theatre art. Particular attention paid to the relationship between the classical and neoclassical approaches to the theatre. Prerequisite: Comm. 252.

COMM. 442. Dramatic Literature and Theory, 3 credits.

Eighteenth, nineteenth, and twentieth century theatre art: The study of the origins of modern popular theatre in sentimentalism and melodrama, including an examination of the theories of sentimentalism, romanticism, and melodrama as they relate to works for the theatre. Particular attention paid to the historical and theoretical foundations of modern dramatic presentations. Prerequisite: Comm. 252.

COMM. 443-444. Theatre History I and II, 3 credits each.

Study of the physical structure and production methods of representative Western Theatres; Ancient Greece to Renaissance and Renaissance to 1900. Considerations given to scenery, auditoriums, costumes, management, and acting practices. Emphasis upon
acquiring an understanding of the most important factors which have influenced perform-
ances during these periods. Prerequisite: Comm. 252.

COMM. 452. Advanced Acting, 3 credits.
Critical study and appreciation of acting developed by lectures, reading, discussion
and presentation of individual and group scenes. Consideration of dramatic literature
from the Classical, Shakespearean, and Restoration periods. Emphasis on the devel-
opment of techniques designed to enhance the skills of advanced students. Prerequisite:
Comm. 351.

COMM. 461. Broadcast Management, 3 credits.
Study of the problems of managing a radio or television station. Emphasis upon solv-
ing specific management problems. Consideration of the social, economic and legal re-
sponsibilities of a broadcast operation. Prerequisite: Comm. 271.

COMM. 465. Advanced Radio Production, 3 credits.
An advanced study of production techniques for commercial and educational radio
broadcasting. Emphasis upon practical experience gained through student production
for the campus FM station. Consideration of production, direction, and presentation of
radio programming. Prerequisite: Comm. 365.

COMM. 466. Broadcast and Cablecast Regulation, 3 credits.
Study of the Role of the Federal Communication Commission in regulating the
broadcasting and cablecasting industries. Consideration of specific FCC cases and their
effects on telecommunications.

COMM. 472. Advanced Television Production, 3 credits.
An advanced study of production techniques for both closed and open-circuit tele-
casting. Emphasis upon practical experience gained through production projects on local
television outlets. Consideration of production, direction, and presentation of television
programs. Prerequisite: Comm. 372.

COMM. 474. The Television Producer, 3 credits.
Study of the role and functions of the television producer in planning, implementing
and evaluating the television program. Emphasis upon application of communication
principles necessary for gaining the intended audience response. Prerequisite: Comm.
472.

COMM. 477. Technological Development of the Motion Picture, 3 credits.
Study of the technological development of the entertainment motion picture. Empha-
sis on the factors affecting decisions by the film producer-director.

COMM. 478. Documentary in Film and Television, 3 credits.
Study of content, style, technique and effect of representative samples of the docu-
mental form. Consideration given to informational and persuasive elements.

COMM. 481. Feature Writing, 3 credits.
Study and practice of advanced techniques in planning and writing feature stories.
Emphasis on individual performance through criticism of student work in conference
with instructor. Prerequisite: Comm. 281, or permission of instructor.

COMM. 483. Editorials and the Editorial Page, 3 credits.
Study of development and nature of the modern newspaper editorial page. Emphasis
upon planning and writing staff editorials and opinion columns. Consideration of the role
of editorial cartoons, letters to the editor, and reprints. Prerequisite: Comm. 281, or permission of instructor.

COMM. 490. Special Studies in Communication, 1-3 credits each semester.

An independent study for students to pursue individual research under the guidance of a faculty advisor. Limited to majors in good standing who are seniors. (Offered only with consent of the Head of the Department.)

COMM. 499. Honors in Communication, 6 credits. Year Course.

COMM. 500. Seminar in Communication, 3 credits.

Study and research in the broad spectrum of communication arts and sciences. Emphasis upon integrating the various aspects for application to academic and practical use. Consideration of topics relating to drama, public address, broadcasting, and interpersonal communication.

COMM. 501 A. Teacher's Workshop: Co-Curricular Activities (Summer only), 3 credits.

An intensive study of the philosophy, organization, and administration of speech activities in the high schools. Emphasis on a selected area of concentration: forensics-debate, drama, or broadcasting. Opportunities for practical work with high school students attending the University Summer Speech and Drama Workshop.

COMM. 501 B. Teacher's Workshop: Television (Summer only), 3 credits.

An intensive study of instructional television for secondary teachers. Analysis of current research on the effects of such media in education. Evaluation of software and hardware. Emphasis on the development of program material for use by the teacher in the classroom.

COMM. 501 C. Teacher's Workshop: Theatre (Summer only), 3 credits.

An intensive study of the elements of play production. Consideration of theatre games, improvisation, movement, drafting, and construction of scenery units. Emphasis on the use of these elements in the preparation of a play for performance.

COMM. 501 D. Teacher's Workshop: Communication (Summer only), 3 credits.

An intensive study and analysis of objectives and methodology of developing communication units for use either in English classes or as independent courses. Participants will develop sample content units, based on state-approved texts, which could comprise a sequential communication program for junior and senior high schools.

COMM. 501 E. Teacher's Workshop: Journalism (Summer only), 3 credits.

An intensive study of the theory and practice of journalism activities for secondary teachers, including problems of advising the school magazine or newspaper. Consideration of the legal status of high school journalism. Emphasis on the teacher's role in the overall production of a publication.

COMM. 520. Seminar in Rhetoric and Public Address, 3 credits.

Study and research in the philosophical and historical bases of rhetorical theory. Emphasis on the process of rhetoric both as a practical art and as a scholarly method. Consideration of topics relating to the development and practice of rhetoric and public address.

Communication Arts  117
COMM. 540. Seminar in Theatre, 3 credits.

Study and research in the aspects of academic and professional theatre. Emphasis upon research methods in solving practical problems of theatrical production. Consideration of topics relating to acting, directing, and technical elements.

COMM. 545. American Theatre History, 3 credits.

Study and analysis of the American experience as presented in the dramatic literature of the country. Emphasis upon basic American themes. Consideration of those themes as they appear in our poems, novels, biographies, and histories, and ultimately in our plays.

COMM. 548. Experimental Theatre, 3 credits.

Study of creative and imaginative drama. Emphasis upon motivating and guiding advanced students to a higher degree of aesthetic appreciation of the theatre. Consideration of the relationship of experimental theatre to the traditional theatre. Prerequisite: Permission of instructor.

COMM. 560. Seminar in Broadcast Media, 3 credits.

Study and research in the history, organization and mechanics of the various media. Emphasis upon the social and artistic roles of the media. Consideration of topics relating to methods of assessing the influence and effectiveness of the broadcast media.

COMM. 580. Seminar in Journalism, 3 credits.

Study and research in the history and philosophy of the function of the newspaper in American Society. Consideration of topics relating to the problems of freedom and responsibility of the press. Emphasis upon contemporary views of the role of the press.
DEPARTMENT OF ENGLISH

Dr. Mark D. Hawthorne, Head of the Department


The program offered by the Department of English is designed to prepare students to enter graduate study; to prepare them for the teaching profession; and to serve as basic preparation for many professions in which skillful use of language is important; for example, law, publishing, freelance writing, creative writing, journalism, public relations, broadcasting, government, advertising, and business. It also offers to students whose professional or vocational interests lie elsewhere an appreciation of the great literary heritage of Western Civilization, with particular emphasis upon British and American literatures, and through the humanistic study of these masterpieces a better understanding of themselves.

Students majoring in English take the B.A. degree, except in the case of the third track listed below.

The English Department offers the following tracks for the English major:

1. The minimum requirement for a major in English is 30 semester hours of courses beyond Eng. 102, 18 hours of which must be on the 300 level or above.

2. The minimum requirement for a major in English with an interdisciplinary focus is 36 semester hours of courses beyond Eng. 102; 24 of these hours must be in English courses, with 15 hours on the 300 level or above. Twelve hours from another discipline or disciplines must be chosen in conference with the advisor.

3. A student completing a major in a B.S. or a B.B.A. degree program may also complete an English major by fulfilling the minimum requirements listed above.

Students must plan programs of study with their English advisors before registering for courses. The Department recommends that students choose a variety of courses covering contemporary and earlier literature, periods, genres, and linguistics. Specifically the student should include the following in his/her program: Eng. 235 and 236 (Survey of English Literature), Eng. 247 or 248 (Survey of American Literature), Shakespeare, one course in Milton or Chaucer. One advanced
course (300–400) in literature taken in the Foreign Languages and Literatures Department and Phil. 360 (Philosophy and Modern Literature) may be included for credit toward an English major. A student desiring secondary teacher certification in English must so specify when confering with his/her English advisor and must include Eng. 420 (Modern English Grammar) as part of the 30 hours requirement.

The minimum requirement for a minor in English is 18 semester hours beyond Eng. 101-102. At least 9 hours must be taken in courses at the 300 level or above.

A minor in English will not meet certification requirements for the Collegiate Professional Certificate.

EXEMPTION FROM FRESHMAN ENGLISH COURSES

For procedures for exemption from freshman English courses, students should consult with the Coordinator of Freshman English or the Head of the English Department.

MAJOR IN ENGLISH
(B.A. Degree)

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<th>Credit Hours</th>
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<td>Foreign Language</td>
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<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Phil. 240</td>
<td>3</td>
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<td>History</td>
<td>6</td>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>Physical Education</td>
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<td>Natural Science</td>
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<tr>
<td></td>
<td>32</td>
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</table>

By the end of his/her sophomore year, the student majoring in English should consult with his/her English advisor to plan a course of study.

**Six to fourteen semester hours of a foreign language are required for the B.A. degree unless the language requirement is satisfied by an exemption test.
PROGRAM FOR A MAJOR IN ENGLISH
QUALIFYING FOR THE SECONDARY
COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

1. Psyc. 233 and 234—Human Growth and Development.
4. Educ. 470—History and Philosophy of Educational Thought or Educ. 471—Values and Teaching.
5. Educ. 480—Student Teaching (senior year).
7. Hth. 370—The School Health Program.

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Description of Courses

English

ENG. 101-102. Reading and Composition, 3 credits each semester. Year Course.
Reviews the principles of grammar and usage in standard written English, directs reading and analysis of selected examples, and in frequent compositions stresses logical relation and arrangement of ideas, clarity, and interest. Procedures are introduced for using the library efficiently, and for preparing a research paper. (A student must pass Eng. 101 before he/she is eligible to take Eng. 102. Both of these courses or their equivalent are prerequisites for all courses in English numbered 200 or above.)

ENG. 233. Survey of Prose Fiction, 3 credits.
Introduction to literature through a selected number of examples of prose fiction.

ENG. 234. Survey of Poetry and Drama, 3 credits.
Introduction to literature through a selected number of examples of poetry and drama.

ENG. 235. Survey of English Literature: From Beowulf to the Eighteenth Century, 3 credits.
A general survey presented chronologically.

ENG. 236. Survey of English Literature: From the Eighteenth Century to the Modern Period, 3 credits.
A general survey presented chronologically.

ENG. 237. Survey of Continental European Literature, 3 credits.
Short stories, novellas, and plays of the eighteenth, nineteenth, and twentieth centuries from France, Germany, Italy, Russia, and Spain.
ENG. 247. Survey of American Literature: From the Beginning to the Civil War, 3 credits.
A general survey presented chronologically.

ENG. 248. Survey of American Literature: From the Civil War to the Modern Period, 3 credits.
A general survey presented chronologically.

ENG.-PSYC. 300. Exploring Personality Through Literature, 6 credits.
Survey of personality theory approached through readings in literature and psychology. (Students required to enroll in Eng. 300 and Psyc. 300 simultaneously.) Prerequisites: Psyc. 231-232 or 233-234, Eng. 101-102, plus three hours chosen from General Studies requirements in literature.

ENG. 302. Special Topics in Literature and Language, 1-3 credits.
Study of a particular literary or linguistic topic. (May be repeated for credit when course content changes.)

ENG. 305. Mythology, 3 credits.
Study of the nature and meaning of Greek myth as interpreted and re-interpreted in significant works of ancient and modern literature.

ENG. 315. Seventeenth-Century Poetry, 3 credits.
Chief poets of the seventeenth century from Donne to the Restoration.

ENG. 320. Literature of the Augustan Age, 3 credits.
English literature from 1660 to 1740 with special emphasis upon Dryden, Swift, and Pope. Attention to critical theories, intellectual and cultural movements, and literary forms.

ENG. 325. Romantic Poetry, 3 credits.
English Literature from 1770 to 1832, with chief emphasis upon the Pre-Romantic Poets, Wordsworth, Coleridge, Shelley, Keats, and Byron. Attention given to critical theories, intellectual and cultural movements, and poetic forms.

ENG. 329. Victorian Literature, 3 credits.
Study of British Literature of the Victorian Period, with primary emphasis on poetry and nonfiction prose.

ENG. 335. Twentieth-Century Poetry, 3 credits.
British and American poetry since 1900.

ENG. 341. Early American Literature, 3 credits.
Significant genres, writers and literary movements of the seventeenth and eighteenth centuries.

ENG. 345. American Romanticism, 1820-1865, 3 credits.
Selected works of major figures such as Emerson, Thoreau, Hawthorne, Poe, Melville, and Whitman.

ENG. 351. American Realism and Naturalism to 1914, 3 credits.
Selected works of major figures such as Dickinson, Twain, Howells, James, Crane, Norris, and Dreiser.
ENG. 355. *Southern Literature*, 3 credits.
Southern authors, especially those of the twentieth century.

ENG. 370. *British Drama to the Nineteenth Century*, 3 credits.
Survey of British drama from the liturgical beginnings through the Renaissance (excluding Shakespeare), and concluding with Restoration and Neo-Classical works.

ENG. 374. *Survey of Modern Drama*, 3 credits.
Chronological treatment of drama from Ibsen to the present.

ENG. 380. *Introduction to the Study of Film as a Narrative Art*, 3 credits.
An introduction to film which applies the concepts of literary study to an analysis of film as a form of narrative. After basic preparation in the history, theory, and techniques of moviemaking, the student will study films made by ten great directors from Chaplin to the present (two hours of lecture and one evening film screening weekly).

ENG. 391-392. *Imaginative Writing*, 3 credits each semester.
Assignments in writing poems and short stories, beginning with brief lectures on the basic principles of each and including reading assignments when helpful. Students may take either or both.

ENG. 394. *Magazine Editing and Design*, 3 credits.
The art of magazine editing, including the formulation of editorial policy, the selection and editing of manuscripts, the selection and use of art work, a study of basic printing techniques and processes, and the development of general design, format and layout.

ENG. 396. *Advanced Composition*, 3 credits.
Extensive exercises in expository writing, with emphasis on rhetorical types of composition, designed to develop in the student sophistication of style.

ENG. 405. *Studies in Comparative Literature*, 3 credits.
Comparative study of selected literature of the Western World.

ENG. 417. *English Linguistics*, 3 credits.
Introduction to English linguistics, including sociolinguistics and psycholinguistics.

ENG. 419. *Traditional Grammar*, 3 credits.
Introduction to traditional grammar probing, its logic, system, and history, with an examination of modern adaptations of conventional rules.

Introduction to modern English grammar. (Required of students desiring secondary teacher certification in English.)

The evolution of the British novel from the beginning with an examination of major works from Fielding to Conrad.

Study of selected British novelists after 1914.
ENG. 441. The American Novel to 1914, 3 credits.
Development of the American novel with an examination of some of the major works from Hawthorne to the Modern Period.

Study of selected American novelists after 1914.

ENG. 451. Chaucer, 3 credits.
The Canterbury Tales and other major works of Chaucer.

ENG. 455. Shakespeare, 3 credits.
Selected comedies, histories, and tragedies, with emphasis on dramatic technique and the Elizabethan stage.

ENG. 461. Milton, 3 credits.
Major prose and poetical works of John Milton, with special emphasis on Paradise Lost.

ENG. 480. Twentieth-Century British or American Author, 3 credits.
Study of the major works of one or more twentieth-century British or American authors. (May be repeated for credit when course content changes.)

ENG. 490. Special Studies in English, 1-3 credits each semester.
Independent study for students with high academic standing. Student may select work in (1) a literary type, period, or author; (2) imaginative writing; or (3) linguistics. (Department Head's approval required; may be repeated for credit when course content changes.)

ENG. 499. Honors, 6 credits. Year Course.

ENG. 505. Growth and Structure of the English Language, 3 credits.
History of the English language with attention to the changing forms of speech as reflected in morphology, phonology, syntax, and semantics.

ENG. 510. Special Authors Seminar, 3 credits.
Intensive study of a major English or American author or of a selected group of authors. (May be repeated for credit when course content changes.)

ENG. 512. Special Topic Seminar, 3 credits.
Study of a literary school, movement, genre, or some other significant literary or linguistic topic. (May be repeated for credit when course content changes.)

ENG. 535. The History of Literary Criticism, 3 credits.
Survey of the nature, function, and development of literary criticism from Aristotle to Eliot.

ENG. 550. Modern Drama, 3 credits.
Representative plays of modern and contemporary dramatists.

ENG. 560. English Literature of the Early Renaissance, 3 credits.
English literature of the early Renaissance, with major emphasis on nondramatic works.
ENG. 572. Contemporary Approaches to English Linguistics, 3 credits.
Intensive survey of English linguistics and its current applications.

ENG. 590. Studies in Old English, 3 credits.
The Old English language with readings in selected poetry and prose of the period.
DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURES

Dr. Elizabeth B. Neatrour, Head of the Department

Professors Conis and Lisle; Associate Professors Barroso, Hamlet-Metz, Kyler, E. Neatrour, and Stewart; Assistant Professors Aliotti, Cohen, Perlman, and Pruitt.

The Department of Foreign Languages and Literatures offers programs designed (1) to teach the student to understand and to speak a language with facility, to develop skill in reading and writing, and to provide an acquaintance with foreign literatures and an appreciation of foreign cultures; (2) to prepare students for the teaching profession, government work, international trade, and research leading to advanced degrees. Majors are offered in French, German, Russian, and Spanish. Minors are offered in these four languages plus Latin.

The minimum requirement for a major in a modern foreign language is 24 semester hours beyond the elementary level. The distribution in modern foreign languages is as follows: 12–15 semester hours in conversation, composition, diction, and grammar; 3–6 semester hours in civilization; 6–9 semester hours in literature. A student majoring in one foreign language must also earn at least 12 semester hours of credit in a second foreign language.

The Department of Foreign Languages and Literatures offers a program leading to teaching certification in Latin. Students desiring secondary teaching certification should consult with Dr. Robert Lisle or Dr. Elizabeth Neatrour.

A minor in a foreign language will consist of 18 semester hours in sequence, including the elementary level. However, 18 semester hours of credits will not be sufficient to meet the requirements for the Collegiate Professional Certificate in a foreign language.

A minor in a foreign language for Elementary Education majors consists of 18 semester hours in one language and 6 semester hours in SeEd. 371C (Clinical Techniques—Foreign Language Education Methods).

Placement tests are given to those majors presenting two or more years of a foreign language at the secondary school level. Final decision on advanced placement rests with the Department of Foreign Languages and Literatures.

126 Foreign Languages and Literatures
Students interested in a program offered by the Department of Foreign Languages and Literatures should consult the Head of the Department, 301 Keezell Hall.

## MAJOR IN FRENCH
**(B.A. Degree)**

<table>
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<th>Sophomore Year</th>
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<td>Fr. 101-102 or Fr. 231-232 or Fr. 300 and Fr. 308</td>
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<td>Fr. 231-232 or Fr. 300 and Fr. 308 or Fr. 337-338</td>
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<td>Electives</td>
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## MAJOR IN GERMAN
**(B.A. Degree)**

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<th>Sophomore Year</th>
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**Foreign Languages and Literatures** 127
### MAJOR IN RUSSIAN
(B.A. Degree)

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### MAJOR IN SPANISH
(B.A. Degree)

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<td>Span. 300 and Span. 308</td>
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128 Foreign Languages and Literatures
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**PROGRAM FOR A MAJOR IN A FOREIGN LANGUAGE QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE**

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their program:

1. Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
2. Educ. 360—*Foundations of Curriculum* (junior year).
3. SeEd. 371C—*Clinical Techniques, Foreign Language Methods* (normally in the first semester of the senior year).
4. Educ. 470—*History and Philosophy of Educational Thought* (senior year) or Educ. 471—*Values and Teaching* (senior year).
5. Educ. 480—*Student Teaching* (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—*The School Health Program* (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

**Description of Courses**

**Departmental Courses**

FL. 260. *Life Styles in Europe-Past and Present.* 1, 2, or 3 credits.

An examination of various periods in European culture in terms of the individual’s life experiences, frustrations, feelings, and attitudes as reflected in literature. The course may be repeated; the topic will be changed each year.
FL. 309.* Civilization: Travel-Study, 1-3 credits.
A directed program of travel-study designed to augment a student's knowledge of a particular civilization. Arrangements must be made with the faculty member designated by the Head of the Department. Permission by the Head of the Department is required prior to enrollment in the program.

FL. 446.* Special Topics in Literature, 1-3 credits.
Study of a particular literary topic. Course may be repeated. Prerequisite: Permission of instructor.

FL. 472.* History and Development of Modern European Languages, 3 credits.
An introduction to descriptive and historical linguistics with specific focus on continental European Languages. Prerequisites: None. Required of all foreign language majors and may be taken by students with no foreign language background. Team-taught in English.

FL. 490.* Special Studies in Foreign Languages, 1-3 credits each semester.
For superior students who wish an opportunity to do independent study under faculty supervision. Work may be done in all languages offered in the department. Permission to enroll must be secured from the Head of the Department.

FL. 499.* Honors, 6 credits.

Literature Courses in Translation

GER. 266. Contemporary German Literature in Translation, 3 credits.
German literature from the Twenties to the present. Knowledge of German is not required. All lectures and readings are in English. Fulfills General Studies requirement in literature, but does not count toward certification in German.

LAT. 265. The Individual and Society in Ancient Greece and Rome, 3 credits.
All readings in English. Discussion of selected works of Greek and Roman literature. Focus on Classical attitudes toward Man, Society, God, and the Meaning of Life. Especially recommended for English and Philosophy majors. Fulfills General Studies requirement in literature, but does not count toward certification in Latin.

RUS. 265-266. Russian Literature in Translation, 3 credits each semester.
First semester: Russian literature to 1880; second semester: 1880 to the present. Knowledge of Russian is not required. All lectures and readings are in English. Either semester fulfills General Studies requirements in literature (3 credits), but does not count toward certification in Russian.

Classical Languages

GRK. 101-102. Elementary Greek, 4 credits each semester.
Designed to provide a reading knowledge of Classical Greek as well as New Testament koiné. Greek life, Greek thought, and Greek culture are stressed. Especially recommended for Science, English, and Philosophy majors.

* These courses are taught in the various languages offered by the department. The title of the course will designate the specific language studied, such as Fr. 309, Ger. 446, Rus. 490, and Span. 499.
GRK. 231-232. *Intermediate Greek*, 3 credits each semester.
An intensive reading course. Selections from Plato and from The New Testament. *Prerequisite: One year of college Greek or the equivalent.*

LAT. 101-102. *Elementary Latin*, 4 credits each semester.
Based on the structural approach, this course covers the elementary work regularly included in the first two years of high school Latin. The material also provides an introduction to Roman life and culture. Especially recommended for English majors.

LAT. 231-232. *Intermediate Latin*, 3 credits each semester.
An introduction to Latin literature. The further study of Latin grammar and the elements of Latin prosody are also presented. *Prerequisite: One year of college Latin or equivalent.*

All readings in English. Discussion of selected works of Greek and Roman literature. Focus on Classical attitudes toward Man, Society, God, and the Meaning of Life. Especially recommended for English and Philosophy majors. Fulfills General Studies requirement in literature, but does not count toward certification in Latin.

One play by Plautus; one by Terence. *Prerequisite: Second year of college Latin or equivalent.*

LAT. 308. *Roman Satire*, 3 credits.
Selected poetry of Horace and Juvenal. *Prerequisite: Second year of college Latin or equivalent.*

LAT. 325. *Roman Historians*, 3 credits.
Opening pages of Livy; major attention to Tacitus. *Prerequisite: Second year of college Latin or equivalent.*

LAT. 328. *Roman Epic Poetry*, 3 credits.
Excerpts from Ennius, Lucretius, Vergil, and Lucan. *Prerequisite: Second year of college Latin or equivalent.*

LAT. 410. *Advanced Syntax and Composition*, 3 credits.
A review of the principles of syntax and a study of the refinements of Latin grammar. Exercises in prose composition. Especially recommended for students planning to teach Latin. *Prerequisite: Second year of college Latin or equivalent.*

Selections from Propertius and Tibullus; major attention to Catullus and Horace. *Prerequisite: Second year of college Latin or equivalent.*

French

The fundamentals of French through listening, speaking, reading, and writing. Practice in pronunciation and development of comprehension through two half-hour sessions a week in the language laboratory.
FR. 105-106. Elementary French Reading, 3 credits each semester.
A systematic study of the fundamentals of grammar. Intensive reading of simple passages. (Cannot be counted toward a major or minor in French.)

FR. 205-206. Intermediate French Reading, 3 credits each semester.
Intensive reading in French in various academic disciplines, according to individual needs. Emphasis on vocabulary and sentence structure. (Cannot be counted toward a major or minor in French.)

FR. 231-232. Intermediate French, 3 credits each semester.
A thorough review of grammar. Vocabulary building, conversation, composition, and reading. Prerequisite: One year of college French or equivalent.

FR. 300. French Conversation and Composition, 3 credits.
Intensive training in the use and comprehension of modern everyday French with emphasis upon conversation and composition to give the student confidence in expressing himself in simple idiomatic French. Instruction is in French. Prerequisite: Fr. 232 or equivalent.

FR. 308. Introduction to French Civilization, 3 credits.
A study of French life and culture and the outstanding contributions of France to world civilization. Instruction is in French. Prerequisite: Fr. 232 or equivalent.

FR. 315. French Phonetics, 3 credits.
Intensive drill in French pronunciation and intonation. Reading of poetry and prose. Instruction is in French. Prerequisite: Fr. 232 or equivalent.

FR. 320. Advanced French Grammar, 3 credits.
Advanced course in grammar and syntax with extensive practice in composition. Instruction is in French. Prerequisite: Fr. 300 or equivalent.

FR. 337. French Literature of the Middle Ages and the Sixteenth Century, 3 credits.
A thorough analysis of selected passages from important French authors of the Middle Ages and the Renaissance Period, giving the student a sufficient background for understanding the evolution of French literary thought. Instruction is in French. Prerequisite: Fr. 300 or equivalent.

FR. 338. French Literature of the Seventeenth and Eighteenth Centuries, 3 credits.
A thorough analysis of selected passages from important French authors of the Classical Period and the Age of Enlightenment, giving the student a sufficient background for his/her understanding of the evolution of French literary thought. Instruction is in French. Prerequisite: Fr. 300 or equivalent.

FR. 405. The French Romantic Movement, 3 credits.
Follows the main current of French literature during the first half of the nineteenth century with special stress upon Victor Hugo, Alphonse de Lamartine, Alfred de Vigny, Alfred de Musset, and others. Instruction is in French. Prerequisite: Three years of college French or equivalent.

FR. 406. The French Realistic Movement, 3 credits.
Follows the main current of French literature during the second half of the nineteenth century with special stress upon the works of Balzac, Stendhal, Flaubert, Zola, and others. Instruction is in French. Prerequisite: Three years of college French or equivalent.

A study of the evolution of the dramatic genre from the Middle Ages to the twentieth century through an analysis of the most representative plays of each period. Instruction is in French. **Prerequisite: Three years of college French or equivalent.**

FR. 425. *French Literature of the Twentieth Century*, 3 credits.

A study of the works of major French writers of the twentieth century. Instruction is in French. **Prerequisite: Three years of college French or equivalent.**

**German**

GER. 101-102. *Elementary German* (4, 1), 4 credits each semester.

The fundamentals of German through listening, speaking, reading, and writing. Practice in pronunciation and development of comprehension through two half-hour sessions a week in the language laboratory.

GER. 105-106. *Elementary German Reading*, 3 credits each semester.

A systematic study of the fundamentals of grammar. Intensive reading of simple passages. (Cannot be counted toward a major or minor in German.)

GER. 205-206. *Intermediate German Reading*, 3 credits each semester.

Intensive reading in German in various academic disciplines, according to individual needs. Emphasis on vocabulary and sentence structure. (Cannot be counted toward a major or minor in German.)

GER. 231-232. *Intermediate German*, 3 credits each semester.

A thorough review of grammar. Vocabulary building conversation, composition, and reading. **Prerequisite: One year of college German or equivalent.**

GER. 266. *Contemporary German Literature in Translation*, 3 credits.

German literature from the Twenties to the present. A knowledge of German is not required. All lectures and readings are in English. Fulfills General Studies requirement in literature, but does not count toward certification in German.

GER. 300. *German Conversation and Composition*, 3 credits.

Intensive training in the use and comprehension of everyday German. Emphasis upon conversation, intonation, and sounds. Compositions based on topics used in conversational practice and parallel readings of contemporary interest. **Prerequisite: Ger. 232 or equivalent.**

GER. 305-306. *Scientific German*, 3 credits each semester.

For students in science and mathematics. German grammar, vocabulary, and syntax will be presented with the main objective being reading, comprehension, and facile translation of technical materials. Instruction in this course will be in English. No language prerequisites needed. (Cannot be counted toward a major or minor in German.)

GER. 308. *Introduction to German Civilization*, 3 credits.

A comprehensive study of the history and the cultural contributions of the German-speaking people of western Europe. Lectures, discussions, oral and written reports. Instruction is in German. **Prerequisite: Ger. 232 or equivalent.**
GER. 320. Advanced German Grammar, 3 credits.

Advanced course in German grammar and syntax with extensive practice in composition. Instruction is in German. Prerequisite: Ger. 300 or equivalent.

GER. 405. The Age of German Classicism, 3 credits.

Readings and interpretation of significant works of Lessing, Schiller, and Goethe. Instruction is in German. Prerequisite: Three years of college German or equivalent.

GER. 415. German Romanticism and Realism, 3 credits.

A study of romanticism and realism with emphasis on romantic poetry and the realistic novel. Instruction in German. Prerequisite: Three years of college German or equivalent.

GER. 426. Modern German Literature, 3 credits.

A study of the main literary trends of the twentieth century. The works of such writers as Herman Hesse, Thomas Mann, Rainer Maria Rilke, Franz Kafka, Heinrich Boll, and Bertolt Brecht are discussed. Instruction is in German. Prerequisite: Three years of college German or equivalent.

GER. 428. German Drama, 3 credits.

A study of the drama during the nineteenth and twentieth centuries from Heinrich von Kleist to Friedrich Durrenmatt. Instruction is in German. Prerequisite: Three years of college German or equivalent.

Russian

RUS. 101-102. Elementary Russian (4, 1), 4 credits each semester.

The fundamentals of Russian through listening, speaking, reading, and writing. Practice in pronunciation and development of comprehension through two half-hour sessions a week in the language laboratory.

RUS. 105-106. Elementary Russian Reading, 3 credits each semester.

An introductory course for students who intend to acquire a reading knowledge of Russian. Systematic study of the fundamentals of grammar. Intensive reading of simple passages for content and meaning.

RUS. 231-232. Intermediate Russian, 3 credits each semester.

A thorough review of grammar. Vocabulary building conversation, composition, and reading. Prerequisite: One year of college Russian or equivalent.

RUS. 265-266. Russian Literature in Translation, 3 credits each semester.

First semester: Russian literature to 1880; second semester: 1880 to the present. Knowledge of Russian is not required. All lectures and readings are in English. Either semester fulfills General Studies requirements in literature (3 credits), but does not count toward certification in Russian. Prerequisites: Eng. 101-102 or equivalent.

RUS. 300. Russian Conversation and Composition, 3 credits.

Intensive training in the use and comprehension of modern everyday Russian with emphasis on conversation, reading, dictation, and composition to give the student confidence and fluency in expressing himself in idiomatic Russian. Prerequisite: Rus. 232 or equivalent.

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RUS. 308. Introduction to Russian Civilization, 3 credits.
Reading and discussion of writings on various aspects of Russian civilization. Instruction is in Russian. Prerequisite: Rus. 232 or equivalent.

RUS. 315. Russian Phonetics, 3 credits.
Intensive drill on Russian sounds and intonation patterns. Continued emphasis upon conversation. Instruction is in Russian. Prerequisite: Rus. 232 or equivalent.

RUS. 320. Advanced Russian Grammar, 3 credits.
Advanced course in grammar and syntax with extensive practice in composition. Instruction is in Russian. Prerequisite: Rus. 300 or equivalent.

RUS. 405. Russian Literature of Nineteenth Century, 3 credits.
Reading and analysis of poetry, prose, and drama by such writers as Pushkin, Les-montov, Gogol, Turgenev, Tolstoy, Dostoevsky, and Chekhov. Instruction is in Russian. Prerequisite: Rus. 300.

RUS. 426. Russian Literature of the Twentieth Century, 3 credits.
Reading and analysis of poetry, prose, and drama by writers from the Symbolists up to the present. Instruction is in Russian. Prerequisite: Rus. 300.

SEE RUSSIAN STUDIES PROGRAM IN THE SCHOOL OF ARTS AND SCIENCES

Spanish

SPAN. 101-102. Elementary Spanish (4, 1), 4 credits each semester.
The fundamentals of Spanish through listening, speaking, reading, and writing. Practice in pronunciation and development of comprehension through two half-hour sessions a week in the language laboratory.

SPAN. 231-232. Intermediate Spanish, 3 credits each semester.
A thorough review of grammar. Vocabulary building, conversation, composition, and reading. Prerequisite: One year of college Spanish or equivalent.

SPAN. 300. Spanish Conversation and Composition, 3 credits.
Intensive training in the use and comprehension of modern everyday Spanish with emphasis upon conversation and composition to give the student confidence in expressing himself in simple idiomatic Spanish. Prerequisite: Span. 232 or equivalent.

SPAN. 307. Spanish Civilization, 3 credits.
A study of the geographical, historical, and cultural development of Spain from medieval times to the present. Instruction is in Spanish. Prerequisite: Span. 232 or equivalent.

SPAN. 308. Latin American Civilization, 3 credits.
A study of the geographical, historical, and cultural development of Latin America from Pre-Columbian times to the present. Instruction is in Spanish. Prerequisite: Span. 232 or equivalent.
SPAN. 310. Survey of Spanish Literature, 3 credits.
A study of Spanish literature from the Middle Ages to the present. Lectures, readings, recitations, discussions, and individual reports. Instruction is in Spanish. Prerequisite: Span. 300.

SPAN. 315. Spanish Phonetics, 3 credits.
Intensive drill in Spanish sounds with practice in intonation and pronunciation in conversation and in the reading of poetry and prose. Instruction is in Spanish. Prerequisite: Span. 232 or equivalent.

SPAN. 320. Advanced Spanish Grammar, 3 credits.
The grammatical structure of Spanish with special emphasis on syntax and stylistics. Practice in composition based on the Spanish of standard contemporary authors and practical usage. Instruction is in Spanish. Prerequisite: Span. 300 or equivalent.

SPAN. 327-328. Survey of Spanish American Literature, 3 credits.
A study of the outstanding literary works from pre-Columbian times to the present with emphasis on the essay, poetry, short story, and novel. Instruction is in Spanish. Prerequisite: Span. 300 or equivalent.

SPAN. 330. Business Spanish, 3 credits.
A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication including interviews, letter writing and simultaneous interpretation. Prerequisites: Span. 231-232 or equivalent.

SPAN. 405. Spanish Novel of the Nineteenth and Twentieth Centuries, 3 credits.
The development of the Spanish novel from the "costumbristas" through the realism of Galdos and from the writers of the Generation of 1898 to the present. Instruction is in Spanish. Prerequisite: Three years of college Spanish or equivalent.

SPAN. 406. Spanish Drama of the Nineteenth and Twentieth Centuries, 3 credits.
Readings and discussion of representative works of Spanish drama from the Romantic period to the present day. Instruction is in Spanish. Prerequisite: Three years of college Spanish or equivalent.

SPAN. 415. The Spanish-American Novel, 3 credits.
Reading and analysis of representative works of Spanish-American novelists of the nineteenth and twentieth centuries. Instruction is in Spanish. Prerequisite: Three years of college Spanish or equivalent.

SPAN. 425. Prose of the Golden Age, 3 credits.
A study of the chivalric, sentimental, pastoral, and picaresque genres of prose literature and of their development through the Golden Age, culminating in Cervantes. Instruction is in Spanish. Prerequisite: Three years of college Spanish or equivalent.

SPAN. 426. Drama of the Golden Age, 3 credits.
A study of the "comedia" of the Golden Age including works of Lope de Vega, Calderon de la Barca, Tirso de Molina, and Ruiz de Alarcon. Instruction is in Spanish. Prerequisite: Three years of college Spanish or equivalent.

SPAN. 450. Stylistics and Advanced Composition, 3 credits.
A study of various styles through analysis of broadly representative writings. Development and acquisition of correct idiomatic style in written Spanish. Instruction is in Spanish. Prerequisite: Span. 320 or equivalent.

136 Foreign Languages and Literatures
DEPARTMENT OF GEOLOGY

Dr. William P. Roberts, Acting Head of the Department

Professor Sherwood; Associate Professors Amenta, Farmer, and Roberts; Assistant Professors Campbell, Fichter, Kearns, Poché, and Sander.

The Department of Geology offers programs of study intended to provide the student with a strong background in the science while offering maximum flexibility in selecting courses to meet the student's needs and interests.

The major is designed around theoretical and practical instruction in geology for students seeking employment in industry, in government, in earth science teaching in the secondary school, and for students planning to continue their studies in graduate school.

The Department offers a four-year B.S. degree program with a major in geology and with a major in geology qualifying for the Secondary Collegiate Professional Certificate. B.A. degree requirements can be met by the addition of 6-14 semester hours in a foreign language and 3 semester hours in philosophy.

The minimum requirement for an undergraduate major in geology is 32 semester hours in geology courses. The program will include the following core:

Geol. 100. The Earth and Man ............... 4 cr. hrs.
Geol. 130. Evolution of the Earth .............. 4 cr. hrs.
Geol. 200. Mineralogy ................. 3 cr. hrs.
Geol. 250. General Paleontology ............. 4 cr. hrs.
Geol. 364. Stratigraphy .................. 3 cr. hrs.
Geol. 365. Structural Geology .............. 3 cr. hrs.
Geol. 399. Field Geology ................. 3 cr. hrs.

A six-week summer field camp is strongly recommended for all geology majors and would transfer as Field Geology credit.

The geology major is required to complete 16 semester hours in related sciences (biology, chemistry and physics) approved by his/her advisor. Six hours of mathematics are required, to be selected from Math. 105, 135, 205, 206, 220, 235, and 236. Mathematics through calculus, mathematical statistics and computer science, and two years of French, German, or Russian are strongly recommended for majors who contemplate graduate study in geology or related environmental sciences. Requirement for a minor in geology is a minimum of 18 semester hours of geology approved by the student's advisor.

Geology 137
A track system in the Geology Department provides three program options.

1. Professional and Graduate School Preparation Track
2. General Bachelors Preparation Track
3. Earth Science Teacher Preparation Track

Recommended courses of study are shown in detail for each of the three tracks. Students are urged to acquire a copy of the track system from a departmental advisor.

PROGRAM FOR A MAJOR IN GEOLOGY QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE IN EARTH SCIENCE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

Psyc. 233. and 234.—*Human Growth and Development* (sophomore year).

Educ. 360.—*Foundations of Curriculum* (junior year).

SeEd. 371.—*Clinical Techniques, Natural Science Methods* (normally in the first semester of the senior year).

Educ. 470.—*History and Philosophy of Educational Thought* (senior year)

or

Educ. 471.—*Values and Teaching* (senior year).

Educ. 480.—*Student Teaching* (senior year).

A course in U.S. History (anytime in the program).

Hth. 370.—*The School Health Program* (anytime in the program).

Geol. 210. or 211.—*Introduction to Oceanography*.

Geol. 320.—*Introduction to Meteorology*.

Geol. 385.—*Surface Processes and Landforms*.

A course in Astronomy.

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Students majoring in other fields may earn certification in earth science by completing the necessary requirements. For students planning to teach in secondary schools, dual certification may be desirable.

Students interested in a program offered by the Department of Geology should consult the Head of the Department, 213 Miller Hall.

138  *Geology*
Description of Courses

Geology

GEOL. 100. The Earth and Man (3, 2), 4 credits.
A broad study of the earth will be interwoven with man’s activities as a geologic agent. Specific topics will include the structure of the earth, mineral resources, oceans, rivers, earthquakes and volcanoes. The long-term implications of man’s interaction with the earth will be explored. (This course is recommended as partial fulfillment of the General Studies requirement in natural science for all students.)

GEOL. 130. Evolution of the Earth (3, 2), 4 credits.
An introduction to the history of the earth from its origin to the present. Physical events and the evolution of life are emphasized through a study of fossils. (This course is recommended as partial fulfillment of the General Studies requirement in natural science for all students.)

GEOL. 200. Mineralogy (2, 3), 3 credits.
A study of morphological crystallography followed by hand specimen mineralogy, and mineral chemistry. Prerequisite: Geol. 100.

GEOL. 210. Introduction to Oceanography, 3 credits.
A general survey of oceanography. Study will include the characteristics of seawater, geology of ocean basins, environmental processes, the ocean as a source of food and minerals, and the ocean as the ultimate recipient of global pollution. (This course may be used by any student as an elective.) (Formerly Geol. 300.)

GEOL. 211. Introduction to Oceanography (3, 2), 4 credits.
Same course description as Geol. 210. (This course is recommended as partial fulfillment of the General Studies requirement in natural science for all students.) (Formerly Geol. 300.)

GEOL. 220. Genetic Mineralogy (2, 2), 3 credits.
A study of mineral genesis. Emphasis is directed toward mineralogical environments, mineral associations, and the geology/mineralogy of classical localities. An appreciation of mineral value and aesthetics is incorporated throughout the course. (May be used by any student as an elective.)

GEOL. 250. General Paleontology: Evolution and the Fossil Record (3, 2), 4 credits.
An introduction to the fossil record including a survey of major invertebrate and vertebrate fossil groups. The origin, evolution, and geologic distribution of these groups and general principles of interpretation of the fossil record. Prerequisite: Geol. 130 or 8 credits in Bio.

GEOL. 290. Optical Mineralogy and Petrography (2, 4), 4 credits.
A study of the optical properties of minerals, and mineral identification with the petrographic microscope. Prerequisite: Geol. 200. (Formerly Geol. 235.)

GEOL. 300. Petrology and Petrography (2, 4), 4 credits.
A study of the origins, geologic settings, and phase equilibria of rocks, particularly igneous and metamorphic. Laboratory will deal with hand specimen and thin section study of petrographic suites. Prerequisite: Geol. 290 and Chem. 101-102 or consent of the instructor. (Formerly Geol. 236.)
GEOL. 310. Gem Minerals (1, 2), 2 credits.

The occurrence and mineralogy of gem minerals and rocks suitable for lapidary. Emphasis is placed on the physical properties of minerals and rocks with reference to lapidary technique. Special attention is given to gem minerals and rocks of the State of Virginia. (May not be used to satisfy undergraduate geology requirements.) Prerequisite: Permission of the instructor.

GEOL. 320. Introduction to Meteorology (2, 2), 3 credits.

A survey of the science of weather including weather forecasting, weather maps and related atmospheric processes. Emphasis is placed on the dynamic aspects of meteorology and the interrelationships of atmospheric phenomena with land masses and the world ocean. (This course may be used by any student as an elective.)

GEOL. 330. Environmental Geology and the Limitations of the Earth, 2 credits.

Man's physical environment and the limitations of a finite earth are emphasized. A general treatment of the various environmental parameters important to man is followed by consideration of more specific topics. Included are catastrophic geological events and the limitations and implications of mineral production and use. (This course may be used by any student as an elective.)

GEOL. 340. Soils and Land Use (2, 2), 3 credits.

The origin, distribution and properties of soils are emphasized in the lecture, laboratory and field. These aspects are used to determine the value of various soil types for such uses as agriculture, forestry, recreation, urban development and structural foundations. Prerequisite: 8 credits in Natural Science.

GEOL. 349. Earth's Economic Resources (2, 2), 3 credits.

Classification, origin, distribution and mining of mineral resources. Special emphasis on the uses of the most important nonmetallic and metallic mineral resources. Modern methods of exploration in discovering ore bodies are described. Prerequisite or Corequisite: Geol. 200.

GEOL. 355. Introduction to Geochemistry (2, 2), 3 credits.

An in-depth study of chemical theory and reactions which are fundamental to many of the processes at work on and near the surface of the earth. Prerequisite: Chem. 101-102 or permission of the instructor.

GEOL. 360. Marine Geology, 3 credits.

Introduction to physical oceanography and principles of marine geology. Geology of the deep sea, coastal zones, and estuaries emphasizing coastal structure, sedimentary processes, and the marine environment. Prerequisite: Geol. 210 or 211.

GEOL. 364. Stratigraphy (2, 2), 3 credits.

The principles of stratigraphy, sedimentary rock classification, physical and biostratigraphic methods of correlation. Regional distribution of sedimentary rock types and ages are considered. Prerequisites: Geol. 100 and 130. (Formerly Geol. 478.)

GEOL. 365. Structural Geology (2, 2), 3 credits.

Major structures of the earth's crust. The causes and results of mountain building processes. Preparation and interpretation of geologic maps. Prerequisite: Geol. 364.

GEOL. 385. Surface Processes and Landforms (2, 2), 3 credits.

The description, classification, analysis, origin, and evolution of land forms. The physical and chemical processes that have formed the present landscape. Advanced interpretation of topographic maps. Prerequisite: Geol. 100.
GEOL. 390. *X-Ray Diffraction* (1, 2), 2 credits.

An elective course for science majors. A study of the basic theories and techniques of X-Ray Diffraction. Implementation and application of X-Ray Techniques to geological problems. **Prerequisite: Geol. 200.**

GEOL. 399. *Field Geology*, 3 credits.

A concentrated field course in selected areas in the Appalachians, Piedmont, or Coastal Plain. To be led by members of the Geology faculty. Geologic report required. **Prerequisite: Geol. 365.**

GEOL. 420. *Structural Analysis* (2, 3), 3 credits.

Study of the physical nature and geometries of minor structures such as folds, cleavages and lineations; study of deformational and mineral growth fabrics in thin section; elements of strain theory and experimental deformation; survey of polyphase deformation in orogenic belts. **Prerequisite: Geol. 365.**


Continues the study begun in the General Paleontology (Geol. 250) course. Completes the study of vertebrate evolution through the reptiles, birds and mammals. Additional subjects will include evolutionary mechanisms and their influence on the interpretation of the fossil record, natural and numerical taxonomy, the measurement of evolutionary rates, extinction, functional morphology and other special topics. **Prerequisite: Geol. 250.**

GEOL. 450. *Geology Seminar*, 1 credit.

An in-depth study of a particular problem in geology, e.g., plate tectonics, astrogeology, low-temperature geochemistry, etc. Scientific literature will be reviewed and discussed. **Prerequisite: 20 credits in Geol. or permission of the instructor.**

GEOL. 485. *Sedimentation* (2, 3), 3 credits.

Principles of sedimentation, analysis, and interpretation of sedimentary processes and environments. Laboratory experiments in the properties of sedimentary particles collected during a required weekend field trip. **Prerequisite: Geol. 200.**

GEOL. 486. *Sedimentary Petrography* (2, 3), 3 credits.

Identification, classification and interpretation of common sedimentary rocks by means of field, hand specimen and petrographic techniques. Field trips required. **Prerequisite: Geol. 300.**

GEOL. 489. *Quantitative Methods in Geology* (2, 3), 3 credits.

Geologic assumptions and quantitative solutions to specialized problems in Earth Science such as: particle orientation and sedimentary fabric, petrofabrics, vectoral and scalar properties of geological measurements; special problems in facies delineations, taxonomic or rock classifications and associations. **Prerequisite: Math. 220 or permission of the instructor.**

GEOL. 493. *Introduction to Geophysics* (2, 2), 3 credits.

A survey of applied geophysics and the relationship of geophysics to the earth as a whole. Topics include Seismology, Gravity, Magnetism, Electrical Methods, and additional selected subjects. The laboratory will stress reduction and interpretation of geophysical data. **Prerequisite: Calculus or permission of the instructor.**
GEOL. 497-498. Problems in Geology, 1–3 credits each semester.

An undergraduate research course in one of the fields of geology. (Open, with permission of a departmental instructor, to advanced students who have adequate preparation.)

GEOL. 499. Honors in Geology, 6 credits. Year Course.

GEOL. 501. Workshop in Geology, 1-3 credits.

An investigation of laboratory techniques in rock and mineral identification, paleontology, geologic and topographic map reading, and field investigations of crustal structures. (May not be used to satisfy undergraduate geology requirements.)

GEOL. 520. The Earth's Crust and Surface Processes (2, 2), 3 credits.

The make-up and structure of the earth's crust. A study of the processes that act on the crust and landforms which result. Prerequisite: Permission of the instructor.

GEOL. 530. Earth Science for Teachers (2, 2), 3 credits.

Problems encountered from the presentation of earth science concepts at the secondary school level. Appropriate laboratory, field and classroom experiences are utilized to improve the students' understanding of the earth. Prerequisite: Permission of the instructor.

GEOL. 535. Paleobiology (1, 4), 3 credits.

Principles of study, techniques, and problems of dealing with organisms and communities preserved in the fossil record. Independent or group research will be emphasized in one or more of the major fossil taxa. Prerequisite: 8 credits in Bio. or Geol.

GEOL. 540. Paleoecology, 2 credits.

An introduction to the evolution of the earth's past environments. Methods of study and interpretation of ancient environments. Biological and geological approaches to paleoecology. Prerequisite: Geol. 535 or permission of the instructor.

GEOL. 550. Mineral and Energy Resources (2, 2), 3 credits.

A survey of the earth's mineral and energy resources including distribution and mode of formation. Environmental implications of extraction and use are considered. Prerequisite: 8 credits in Geol.
DEPARTMENT OF HISTORY

Dr. Raymond C. Dingledine, Jr., Head of the Department


The Department of History offers a program designed for students whose primary academic interest is in history as a humanity or a social science. The program provides a broad background for careers in business and government as well as thorough preparation for teaching and the liberal professions.

The Department offers both a major and a minor in History. The major is available only to those students meeting the requirements for the Bachelor of Arts degree: 3 semester hours of Philosophy and completion of the second year of a college Foreign Language.

The minimum requirement for a major in History is 33 semester hours of history, including Hist. 233-234 (United States History) and Hist. 495 (History Seminar). At least 6 of the remaining 24 hours must be in courses outside of the field of United States history. At least 9 hours in addition to History Seminar must be in courses at the 400 or 500 level.

The minimum requirement for a minor in History is 24 semester hours of history, including Hist. 233-234 (United States History). At least 6 of the remaining 18 hours must be in courses outside of the field of United States history.

Six hours of courses in History at the 100 or 200 level, with at least 3 hours in a non-U.S. area, are a General Studies requirement for all students (See pgs. 39-41).

The Virginia teacher certification requirement of a course in American History may be met by either Hist. 233 (United States History to 1877); or Hist. 234 (United States History since 1877).

Students interested in a program in the Department of History should consult Dr. Raymond C. Dingledine, 201 Jackson Hall.
### MAJOR IN HISTORY  
(B.A. Degree)

<table>
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<tr>
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<td>Hist. 233-234</td>
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<td>6-8</td>
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### PROGRAM FOR A MAJOR IN HISTORY QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

1. Psyc. 233 and 234—Human Growth and Development (sophomore year).
2. Educ. 360—Foundations of Curriculum (junior year).
3. SeEd. 371H—Clinical Techniques, Social Science Methods (normally in the second semester of the junior year or first semester of the senior year).
4. Educ. 470—History and Philosophy of Educational Thought (senior year) or Educ. 471—Values and Teaching (senior year).
5. Educ. 480—Student Teaching (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—The School Health Program (anytime in the program).
8. The program must include a course in basic economics.

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.
Description of Courses

History

HIST. 101. History of Civilization to 1650, 3 credits.
A survey of important historical developments from prehistoric times to the mid-seventeenth century. Emphasis is given to the rise and decline of great civilizations and to their lasting contributions to mankind. (Formerly Hist. 255.)

HIST. 102. History of Civilization since 1650, 3 credits.
A survey of important historical developments from the mid-seventeenth century to the present. Emphasis is given to the growth of nationalism, the development of colonialism, and to the events, problems, and conflicts of the present century. (Formerly Hist. 256.)

HIST. 233. United States to 1877, 3 credits.
A survey of United States history from 1776 through Reconstruction. Interpretation and analysis are stressed.

HIST. 234. United States since 1877, 3 credits.
A survey of United States history from Reconstruction to the present. Interpretation and analysis are stressed.

HIST. 263. Africa, 3 credits.
Emphasis is placed on the social and cultural aspects as well as the emerging role the continent plays in contemporary world history. (Formerly Hist. 363.)

HIST. 265. Europe to 1648, 3 credits.
A selective survey of European history from the fall of the Roman Empire to the disintegration of Christian unity.

HIST. 266. Europe since 1648, 3 credits.
A selective survey of European history from the rise of royal Absolutism to the waning of the West.

HIST. 267. Latin America, 3 credits.
A survey of the history of Latin America examining the Pre-Columbian Indian civilizations, the Spanish and Portuguese conquest, the colonial era and its impact, the wars of independence, and selected case studies of the early national period. (Formerly Hist. 367.)

HIST. 268. Contemporary Latin America, 3 credits.
A study of the political, economic, social, and cultural history of Latin America during the twentieth century. Special attention is given to selected countries which have played a leading role in Latin-American affairs. (Formerly Hist. 368.)

HIST. 270. Modern Middle East, 3 credits.
A survey of the political evolution of the modern Middle East. Emphasis is placed on the impact of Western imperialism, the problems of Arab nationalism, the origins of the Arab-Israeli conflict, and the involvement of the Soviet Union and the United States in the Middle East today. (Formerly Hist. 370.)
HIST. 273. Asia to 1600, 3 credits.
A survey of East, Southeast, and South Asian history from their beginnings to about 1600, with emphasis on the cultural and political developments. (Formerly Hist. 373)

HIST. 274. Modern Asia, 3 credits.
A survey of East, Southeast, and South Asia from around 1600 to the present. Particular attention is given to the impact of the West on the traditional societies and governments of the Eastern World and to nationalism, communism, and the rise of new nations.

HIST. 300. American Military History, 3 credits.
A survey of the development of American military institutions, policies, experience, and traditions in peace and war from colonial times to the present. (Formerly Hist. 250.)

HIST. 348. Colonial America, 3 credits.
An interpretive survey of England's mainland colonies from 1558 to 1775.

HIST. 350. Virginia, 3 credits.
An interpretive survey of the history of Virginia from its colonial beginnings to the present time.

HIST. 353. Trans-Mississippi West, 3 credits.
A study of the United States west of the Mississippi from the early Spanish exploration and settlement through the progressive waves of explorers, trappers, miners, soldiers, and farmers as they encountered the western environment, the Indians, and one another.

HIST. 355. Afro-American History to 1877, 3 credits.
A survey of the role of the Negro in the United States from its colonial beginnings through Reconstruction, with attention to the West African background, the slave trade, the Negro in the ante-bellum South and North, and postwar adjustments and developments.

HIST. 356. Afro-American History since 1877, 3 credits.
A survey of the role of the Negro in the United States from Reconstruction to the present, with attention to the institution of segregation, the Northern migration, the Negro in America's wars, the Civil Rights Movement, black leadership, and the racial situation today.

HIST. 371. India, 3 credits.
A survey of India from the earliest times to the attainment of national independence following World War II. Particular attention is given to traditional Indian Civilization, its impact on India's Asian neighbors, its response to the intrusion of Western power, the British in India, and the struggle for independence.

HIST. 383. Early England, 3 credits.
A survey of English history from the earliest times to the late seventeenth century. Particular attention is given to the rise of Parliament and the growth of limited monarchy.

HIST. 384. England and the Empire-Commonwealth, 3 credits.
A survey of English history from the late seventeenth century to the present. Particular attention is given to the growth of British democracy, the industrial revolution, and the rise and fall of the British Empire.
HIST. 385. Russia to 1855, 3 credits.
A survey of Russian history from the origins of the Russian state down through the reign of Nicholas I. Attention is given to such topics as the Kievan state, the Muscovite state, the rise of Imperial Russia, and the emergence of Russia as a Western European power.

HIST. 386. Russia since 1855, 3 credits.
A survey of Russian history from the reign of Alexander II to the present. Attention is given to such topics as the decline of Imperial Russia, the rise of the revolutionary movement, and the emergence and consolidation of the Soviet state.

HIST. 387. Germany to 1815, 3 credits.
A survey of the history of the Germanic-speaking lands of Central Europe from the time of Charlemagne to the end of the French Revolution. Emphasis is given to political, social, economic, and cultural developments in all the German states, with special attention being given to Austria and Prussia.

HIST. 388. Germany since 1815, 3 credits.
A survey of the history of Germany during the struggle for unification, the Empire, World War I, Weimar Germany, the Nazi years, and the Post-World War II developments. Emphasis is given to political, economic, military, social, and cultural developments.

HIST. 389. France to 1789, 3 credits.
A survey of French history from the Capetians to the end of the Old Regime, 987–1789. Particular attention is given to France’s medieval heritage, the impact of the Renaissance, the Protestant revolt, the policies of Richelieu, Colbert, and Louis XIV, and the background of the French Revolution.

HIST. 390. France since 1789, 3 credits.
A study of the social and political events which determined the course of French history from the Revolution through the Fifth Republic. Particular attention is given to the social, economic, and cultural currents which have contributed to the making of contemporary France.

HIST. 405. Women in United States History, 3 credits.
A survey of the role of women in the United States from the colonial period to the present. Attention is given to contributions of the ordinary woman, the Woman’s Rights movement, the impact of women on reform and political movements, and the changing status of women in society.

HIST. 425. Civil War and Reconstruction, 3 credits.
A study of the background, development, personalities, and aftermath of the Civil War. Special attention is given to the coming of the War and different explanations of its causes, and to the policies and significance of Reconstruction, with varying interpretations thereof.

HIST. 430. The United States and the Contemporary World, 3 credits.
A study of the changes in United States diplomacy from 1941 to the present. Primary emphasis is on the development of the Cold War, the relations with newly independent nations, and the attempts to maintain security in an uncertain world.

HIST. 439. Selected Topics in American History, 3 credits.
Selected topics are studied in depth. This course may be repeated. See Schedule of Classes for current topic.
HIST. 450. Modern China, 3 credits.
China since 1840, with particular attention given to China's response to the West, the disintegration of Imperial China, the development of Chinese nationalism, the origin and nature of Chinese Communism, and China under Mao.

HIST. 460. Modern Japan, 3 credits.
The development of Japan from around the mid-nineteenth century to the present. Attention is given to the collapse of isolation, the end of the Shogunate, the creation of a modern state, the years of party government, the rise of militarism, the Pacific War, the Occupation, and the New Japan.

HIST. 476. Ancient History, 3 credits.
A survey of the rise and fall of ancient civilizations of the Near East and Mediterranean area.

HIST. 477. Medieval Europe, 3 credits.
Attention is focused on Europe in the Middle Ages, with a concentration on social and intellectual aspects and on the development of parliamentary institutions.

HIST. 478. Renaissance and Reformation, 3 credits.
A study of High Medieval civilization as an introduction to the history of Modern Europe. Attention is given to the Italian and Northern Renaissance, the fragmentation of Western Christendom, the intellectual impact of Luther and Calvin on Western thought, and the structure of Tudor despotism in England.

HIST. 483. Baroque and Revolutionary Europe, 1648-1815, 3 credits.
A study of the unfolding of European civilization from the Baroque through the Napoleonic era. Attention is given to the Old Regime society and its institutions, the causes of popular revolts, the Enlightenment, the beginnings of industrialism and urbanism, and the impact of the French Revolution upon Europe.

HIST. 485. Nineteenth Century European Civilization, 1815-1914, 3 credits.
An interpretive study of European history from the Congress of Vienna to the outbreak of the First World War. Particular attention is given to the intellectual climate of the period, with emphasis on liberalism, nationalism, socialism, and nihilism.

HIST. 486. Europe since 1914, 3 credits.
An interpretive study of European history from the First World War to the Cold War, with special emphasis on the revolutions of 1917-19, the rise of totalitarianism, the origins of the Second World War, and the continuing crisis of values.

HIST. 489. Selected Topics in World History, 3 credits.
Selected topics are studied in depth. This course may be repeated. See Schedule of Classes for current topic.

HIST. 490. Special Studies in History, 3 credits each semester.
Designed to give capable students in History an opportunity to do independent study under faculty supervision. (Offered only with consent of the Head of the Department.)

HIST. 491. Travel Studies Seminar, 3 credits.
Designed to encourage the student to augment the regular academic program through independent investigation including organized travel-study. Consent of the Head of the Department necessary; prearrangements must be made with a designated faculty member who will direct the study with preparatory instructions and final requirements.
HIST. 495. *History Seminar*, 3 credits.
A course for senior history majors in the nature and philosophy of history, with emphasis on historiography and problems of interpretation. *Required of History Majors.*

HIST. 499. *Honors*, 6 credits. Year Course.

HIST. 501. *Workshop in History*, 1-3 credits.
Intensive study of topics of current interest and demand. Primarily designed for history and social studies teachers. *May be repeated for credit when content is different.*

HIST. 508. *Internship in Museology*, 3 credits. (Crosslisted as Art 508).
An internship program which allows the student to study the philosophy and practice of museology and provides an opportunity for individual research and experience in preparation for careers in art museums. Enrollment in this course subject to approval of Art and History department heads.

An interpretive study of the political, economic, social, and cultural history of the United States from the French and Indian War through the Federalist period. *Prerequisite: Hist. 233 or equivalent.*

An interpretive study of the political, economic, social, and cultural history of the United States from the election of Jefferson through the Jacksonian era. *Prerequisite: Hist. 233 or equivalent.*

An interpretive study of United States history from Reconstruction through World War I. Special attention is given to the nation’s emergence as an industrial and urban society and as a world power, and to third party and reform movements of the late nineteenth and early twentieth centuries. *Prerequisite: Hist. 234 or equivalent.*

HIST. 531. *Recent United States History*, 3 credits.
An interpretive study of the United States since World War I, emphasizing the changing roles of the national government in domestic affairs and of the United States in its world relations. *Prerequisite: Hist. 234 or equivalent.*

HIST. 545. *Latin America and the United States*, 3 credits.
An examination of the diplomatic relations between Latin America and the United States from the era of the Latin-American revolutions for independence to the present. Emphasis is placed on the Monroe Doctrine and its extensions, and the development of the Pan-American system. *Prerequisites: Hist. 233-234 or equivalent.*

HIST. 546. *Mexico, Central America, and the Caribbean*, 3 credits.
A regional study of the history of Central America and the Caribbean nations with special emphasis given to Mexico from the Revolution of 1910 to the present. *Prerequisite: Hist. 234 or equivalent.*

HIST. 547. *South America*, 3 credits.
Historic development of the continent with special attention to selected nations since the early national period of the nineteenth century. *Prerequisite: Hist. 234 or equivalent.*
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<tr>
<td>HIST 559</td>
<td>Modern France, 3 credits</td>
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<td>Topical studies in French history from the fall of Napoleon I to the present. Prerequisite: General Studies history or equivalent.</td>
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<tr>
<td>HIST 562</td>
<td>Modern Germany, 1918–Present, 3 credits</td>
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<td>An advanced study of twentieth century Germany. Readings and discussion center around the aftermath of World War I, Weimar Germany, the rise of Nazi Germany, the Third Reich, World War II, and the development of West and East Germany. Prerequisite: General Studies history or equivalent.</td>
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<tr>
<td>HIST 565</td>
<td>Twentieth Century Britain, 3 credits</td>
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<td>An examination of the major themes of British history in the twentieth century, with attention to political, social, economic, diplomatic, and imperial topics from the pre-World War I decade through the post-World War II decades. Prerequisite: General Studies history or equivalent.</td>
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<td>HIST 575</td>
<td>Soviet Russia, 3 credits</td>
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<td>A study of Soviet Russia from the 1917 Revolution to the present. Readings and discussion will emphasize significant political, economic, social, and cultural developments. Prerequisite: General Studies history or equivalent.</td>
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<td>HIST 578</td>
<td>Eastern Europe, 3 credits</td>
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<td>A study of the lands between Germany and Russia, from the Baltic to the Balkans. Emphasis is on the Habsburg Empire and its successor states, the origins of the World Wars, the post-World War II communist governments, and the cultural and intellectual contributions of the Eastern European peoples. Prerequisite: General Studies history or equivalent.</td>
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<td>HIST 580</td>
<td>West Africa, 3 credits</td>
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<td>An examination of the whole sweep of history from neolithic times through twentieth century independence movements of that part of Africa from which the blacks of America trace their ancestry. The area includes the basins of Lake Chad and the Senegal, Niger, Gambia, Volta, Sanaga, Ogooue, Congo, and Cuanza rivers. This course is designed especially for those teaching Black History or Black Studies in secondary schools. Prerequisite: General Studies history or equivalent.</td>
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<tr>
<td>HIST 585</td>
<td>Southeast Asia, 3 credits</td>
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<td>A history of mainland Southeast Asia from Burma to Vietnam, Indonesia, and the Philippines, with emphasis on the influence of Indian and Chinese civilizations, the impact of European colonial rule, the rise of nationalism, the gaining of independence, and the postwar political developments. Prerequisite: General Studies history or equivalent.</td>
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DEPARTMENT OF MATHEMATICS

Dr. William M. Sanders, Head of the Department

Professors Fisher, Hanson, and Sanders; Associate Professors Austin, Lyons, Marrah, McLean, and Mullenex; Assistant Professors Davenport, Kempton, Klippert, Lazorack, Lenkerd, LePera, Mills, Smith, Spresser, Taylor, and Ziegenfus.

The Mathematics Department offers programs of study which lead to careers in teaching mathematics in the secondary schools and in junior colleges, to careers as mathematicians in industry and in government, and to further study in graduate school. The Department also recognizes its responsibility in providing courses for the non-mathematician who needs to make effective use of mathematics in his/her chosen career.

The minimum requirement for a major in mathematics is 37 semester hours in mathematics courses numbered above 220. The following courses are required of all majors: Math. 235-236-237, Analytic Geometry and Calculus; Math. 238, Digital Computer Programming; Math. 360, Linear Algebra. Additional requirements must be completed in one of the following two classifications:

A. Candidates for Collegiate Professional Teaching Certificate

B. All others
   3. A one-year sequence must be completed in either Math. 410-411, Advanced Calculus; or Math. 430-431, Abstract Algebra.

The completion of the above requirements and the inclusion of approved electives to total 37 semester hours satisfy the department requirements for a major in mathematics.

Although students are not required to do so, they are encouraged to select one of the following concentrations which introduce areas...
where mathematics is applied or in which post-graduate study may be pursued. A minimum of 15 semester hours must be completed in a particular concentration.

A. Applied Mathematics

B. Computer Science
5. Math. 389, Linear Computational Mathematics; or BEOA. 324, COBOL Programming Language.

C. Pure Mathematics

D. Statistics

The minimum requirement for a minor in mathematics is 24 semester hours including Math. 235-236 (Analytic Geometry and Calculus). No more than 6 semester hours from the selections in the department numbered below 200 may be used toward the minor. Each student minoring in mathematics must obtain prior approval of mathematics courses to be counted in the minor from the Head of the Department or designate.

PROGRAM FOR A MAJOR IN MATHEMATICS QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

(1) Psyc. 233 and 234—Human Growth and Development (sophomore year).
(2) Educ. 360—Foundations of Curriculum (junior year).

Mathematics
Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Brochures outlining the various programs in mathematics are available. Students interested in the programs offered by the Department of Mathematics should consult Dr. W. M. Sanders, 106 Burruss Hall.

**Description of Courses**

**Mathematics**

**MATH. 100. Introduction to BASIC, 1 credit.**

An introduction to computing using BASIC.

**MATH. 101. Introduction to Computing, 1 credit.**

An introduction to computing using FORTRAN applicable to the IBM 1130 Digital Computer.

**MATH. 103-104. Mathematics: A Cultural Approach, 3 credits each semester.**

Mathematics as an element of general culture. (Recommended for students in the fine arts and the humanities. Either or both semesters may be taken for credit.)

**MATH. 105-106. Finite Mathematics, 3 credits each semester.**

Logic and sets applied to elementary probability. Matrices and determinants, linear programming, game theory and applications. (Recommended for students in social, behavioral, and biological sciences, and related areas.)

**MATH. 107-108. Fundamentals of Mathematics, 3 credits each semester.**

A development of basic concepts of elementary mathematics. Designed for prospective elementary school teachers.

**MATH. 125-126. Introduction to College Mathematics, 3 credits each semester.**

Topics from college algebra, trigonometry, and analytic geometry. Prerequisites: One entrance unit in algebra and one entrance unit in plane geometry.

**MATH. 135. Elementary Functions, 3 credits.**

Algebraic, exponential, logarithmic and trigonometric functions. (A student may not have credit for both Math. 126 and Math. 135. For freshmen who wish to enroll in Math. 235 in the following semester.)
MATH. 205. Introductory Analysis I, 3 credits.
Topics from differential calculus with applications to the social, behavioral, or life sciences and business or management. Prerequisite: Three hours of college level mathematics or consent of the instructor. Not open to majors in mathematics, physics, or chemistry.

MATH. 206. Introductory Analysis II, 3 credits.
Topics from integral calculus with applications to the social, behavioral, or life sciences and business or management. Prerequisite: Math. 205, Introductory Analysis I. Not open to majors in mathematics, physics, or chemistry.

MATH. 208. Intuitive Foundations of Geometry, 2 credits.
A study of space, plane, and line as sets of points. (Required for elementary education majors. May not be used to satisfy other mathematics requirements.)

MATH. 220. Elementary Statistics, 3 credits.
Descriptive statistics, frequency distributions, sampling, estimation and testing of hypotheses, regression and correlation. Prerequisite: Math. 105 or Math. 135.

MATH. 235-236. Analytic Geometry and Calculus, 5 credits each semester.
A course integrating the subject matter of analytic geometry and differential and integral calculus. Prerequisites: Math. 125-126 or Math. 135 or equivalent.

MATH. 237. Analytic Geometry and Calculus III, 3 credits.
A continuation of Math. 235-236, including sequences and infinite series. Prerequisites: Math. 235-236.

MATH. 238. Digital Computer Programming, 3 credits.
Flow charting, programming and solving problems using FORTRAN IV and the IBM 1130 Computer. Prerequisite: 5 credit hours of mathematics.

MATH. 310. Elementary Theory of Numbers, 3 credits.
Properties of integers and prime numbers, divisibility, congruence, residues and selected topics.

Introduction to basic concepts in statistics with applications of statistical techniques, including estimation, test of hypothesis, introduction to regression, analysis of variance, and topics in experimental design. Prerequisite: 6 credits of mathematics or consent of the instructor.

MATH. 335. Introduction to Topology, 3 credits.
Metric spaces, limits, continuous maps and homeomorphisms, connectedness, compact topological spaces and applications. Prerequisite: Math. 237.

MATH. 338. Mathematical Iteration, 3 credits.
Iterative techniques applied to finding the zeros of functions of one or more variables, systems of non-linear equations, interpolation, and numerical integration. Prerequisites: Math. 237 and Math. 238.

MATH. 341. Mathematical Models—Optimization, 3 credits.
Mathematical modeling with applications to business, ecology, psychology, sociology, and political science. Prerequisite: 6 credits of mathematics or consent of the instructor.

154 Mathematics
MATH. 360. Linear Algebra, 3 credits.
Functions, vector spaces, matrices and systems of linear equations.

MATH. 361. Algebraic Structures, 3 credits.
Groups, rings, fields and polynomial rings.

MATH. 375. The Real Number System, 3 credits.
A development of the real number system through a systematic approach to the natural numbers, integers, rationals and irrationals.

MATH. 376. Probability, 3 credits.
Probability spaces, random variables, discrete and continuous distributions with applications. Prerequisite: Math. 236.

MATH. 386. Differential Equations, 3 credits.
A study of elementary ordinary differential equations, linear equations, systems of linear equations, series solutions, applications and selected topics. Prerequisite: Math. 237.

MATH. 389. Linear Computational Mathematics, 3 credits.
An introduction to linear programming, linear systems, and linear analysis. Prerequisite: Math. 238 and Math. 360.

MATH. 390. Combinatorics, 3 credits.
An introduction to combinatorics—generating functions, finite fields, combinatorial probability, partitions and representation theory. Prerequisite: Permission of the instructor.

MATH. 395-396. Applied Mathematics, 3 credits each semester.
Vector analysis, line and surface integrals, Fourier series, partial differential equations, Laplace Transforms, complex functions, and selected topics. Prerequisite: Math. 386.

MATH. 410-411. Advanced Calculus, 3 credits each semester.
Limits, continuity, differentiation, sequences, series, integration, and selected topics. Prerequisite: Junior standing in mathematics or consent of the instructor.

MATH. 421. Assembly Language, 3 credits.
Computer programming in assembly language. Study of computer structure, digital representation of data, machine language, instruction execution, addressing techniques, and subroutine linkage. Prerequisite: Completion of a 3 credit course in FORTRAN, COBOL, or other algorithmic language and consent of the instructor.

MATH. 430-431. Abstract Algebra, 3 credits each semester.
A study of groups, rings, fields, vector spaces, linear transformations, and selected topics. Prerequisite: Junior standing in Mathematics or consent of the instructor.

MATH. 450. Design and Analysis of Algorithms, 3 credits.
An introduction to the analysis, design, and theory of algorithms. Algorithms studied will be selected from searching, sorting, graph theory, etc. Prerequisites: Math. 235 and Math. 238, or consent of the instructor.
MATH. 467-468. Selected Topics in Mathematics, 1-3 credits each semester.

Topics in advanced mathematics which are of special interest to the student but not covered in the regularly offered courses. (Offered only with consent of the Head of the Department.)

MATH. 475. Fundamental Concepts of Geometry, 3 credits.

Origin and development of geometry, axiomatic systems, mathematical proof, and special topics from incidence geometry.

MATH. 477. Statistics, 3 credits.

Sampling distributions; point and interval estimation; tests of hypotheses; and design of experiments. Prerequisite: Math. 376.

MATH. 488. Vector Analysis, 3 credits.

Vector algebra, differentiation and integration of vector functions, and application to physics. Prerequisites: Math. 235-236.

MATH. 492. Senior Seminar in Mathematics, 1 credit.

A seminar for senior mathematics majors. Prerequisites: Senior standing and permission of the Head of the Department.

MATH. 497-498. Independent Study, 1-3 credits each semester.

Independent study in mathematics under faculty supervision. (Offered only with consent of the Head of the Department.)

MATH. 499. Honors, 6 credits. Year Course.

MATH. 506. Mathematical Statistics, 3 credits.

Sampling distributions; point and interval estimation; tests of hypothesis; regression and correlation; design and analysis of experiments.

MATH. 510. Advanced Calculus I, 3 credits.

A rigorous treatment of fundamental concepts of the calculus, further topics from the calculus of functions of one variable, and calculus of real functions of finitely many real variables. Prerequisite: At least two semesters of calculus.

MATH. 511. Advanced Calculus II, 3 credits.

Continuation of Math. 510.

MATH. 515. History of Mathematics, 3 credits.

Topics in the history of mathematics, chiefly before the eighteenth century.

MATH. 520. Foundations of Euclidean Geometry, 3 credits.

A study of the structure and content of Euclidean geometry from an advanced standpoint.

MATH. 525. Numerical Analysis, 3 credits.

Error analysis, interpolating functions, roots of equations by successive approximations, iterative methods of solving simultaneous linear equations, and programming. Prerequisite: Math. 237 (or consent of the instructor).

MATH. 530. Abstract Algebra, 3 credits.

A study of groups, rings, integral domains, and fields.

156 Mathematics
MATH. 535. Topology I, 3 credits.
Introduction to general and point set topology.

MATH. 550. Theory of Numbers, 3 credits.
Topics in number theory, including divisibility properties, integral solutions of equations, congruences, prime numbers, arithmetic functions, and number theoretic functions.

MATH. 560. Complex Variables I, 3 credits.
Classical theory of functions of a complex variable. Prerequisite or corequisite: Math. 510 or equivalent.
DEPARTMENT OF MUSIC

Dr. Joseph J. Estock, Head of the Department

Professors Estock, Kurtz, Lyon, Ohlsson, Perkins, and West; Associate Professors Hochheimer, Ininger, McEnderfer, McPherson, L. Watkins, and Wright; Assistant Professors Ashby, Buchanan, Christian, Cross, J. Cryder, Gier, Kniebusch, Lance, Little, Tynes, and D. Watkins; Instructors S. Cryder, Ingles, and Moulton.

The Department of Music provides opportunities for students to study music for personal enrichment and offers specific programs leading to professional careers in music. The program is also designed to provide students with a variety of activities and courses to satisfy their musical needs and interests.

In support of these objectives, the department is organized for three purposes: 1) to prepare students to teach vocal and/or instrumental music in public and private schools; 2) to provide a specialization for students who wish to pursue music as a profession in performance or composition and in higher education; and 3) to provide for all students basic music study and opportunities for further musical growth.

An important additional function of the Department of Music is to provide the campus community and Shenandoah Valley area with cultural benefits through on and off-campus music courses and performances throughout the year. These performances include faculty and student recitals, concerts by the numerous musical ensembles within the department, and performances, clinics and workshops by visiting artists and groups.

Students majoring in the Department of Music work toward the Bachelor of Music, Bachelor of Music Education, or the Master of Music Education degree, while those who do not plan to major in music may choose the Music Minor program or the Music Concentration for Elementary Education majors. Most music courses, including all performing organizations, are open to all university students provided the prerequisites, if any, are observed. Students may elect private or group lessons only after consultation with appropriate music faculty during registration.

The Department of Music is a fully-accredited member of the National Association of Schools of Music.

ADMISSION REQUIREMENTS

It is assumed that students choosing to major in music possess sufficient musical talent to indicate promise in their field and would have
had the necessary background and experience in the performance medium they elect for their major.

Although students desiring admission to James Madison University must follow the usual procedure for admission by writing the Director of Admissions, no student will be accepted as a music major until an audition and a music aptitude placement test is successfully completed. Information regarding this requirement can be secured from the Director of Admissions or Head of the Music Department.

Auditions, music aptitude tests, and interviews are scheduled on the University campus and in selected areas of Virginia during the Fall and first part of the Spring semesters. Specific dates are established early in the school year and are announced to high school music teachers, guidance counselors, and to prospective music students upon request.

Candidates who find it impossible to appear for scheduled on or off-campus auditions because of serious conflicts should contact the Head of the Music Department and try to arrange for a special appointment. If distance is a factor, a high quality tape recording demonstrating the student's ability will serve as a criterion for acceptance. In this latter case, the music aptitude test will be administered during Summer Orientation or the registration period.

The audition should reveal the student's highest level of musical attainment. Appropriate literature of at least two selections of varying style and tempo are suggested so that an accurate evaluation of the candidate's ability can be made. The musical aptitude test is primarily used to determine music theory class-level placement.

MUSIC SCHOLARSHIPS

The Music Department of James Madison University awards music scholarships to qualified undergraduate and graduate students.

Determined primarily on performing ability and department needs, stipends are awarded to keyboard, voice, wind, string, percussion, and composition students, and are assigned on either a one-time or continuing basis.

For new students, scholarships are awarded on the basis of evaluations determined at entrance auditions.

MUSIC DEPARTMENT STUDENT HANDBOOK

For more detailed information on student affairs, scholarships, admission and promotion policies, requirements for recital performance, ensemble participation, recital and concert attendance, reviews and juries, piano proficiencies, and additional pertinent information, stu-
Students should refer to the Music Department Student Handbook. Student handbooks may be obtained from the Music Department Office, Duke M-102, or by writing Dr. Joseph J. Estock, Head of the Music Department.

**REQUIREMENTS FOR ALL MUSIC DEGREES**

All music majors must complete the 43-hour General Studies program, three semester hours of elective credits, and a 27-credit hour core program of music courses common to both the Bachelor of Music degree and the Bachelor of Music Education degree. The remaining hours are specified under the various concentrations. Ensemble participation is also required for each semester in attendance; this ensemble credit will be included in the student’s transcript, but may not be applied toward minimum degree requirements.

**BASIC MUSIC CORE FOR ALL MAJORS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. 100-101 or 102-103, Class Piano</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 141-142, Theory I, Writing and Analysis Techniques</td>
<td>6</td>
</tr>
<tr>
<td>Mus. 143-144, Theory I, Aural Perception and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 175, Music as a Profession</td>
<td>1</td>
</tr>
<tr>
<td>Mus. 241-242, Theory II, Writing and Analysis Techniques</td>
<td>6</td>
</tr>
<tr>
<td>Mus. 243-244, Theory II, Aural Perception and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 265-266, Music History</td>
<td>6</td>
</tr>
<tr>
<td>Mus. 317, Basic Conducting</td>
<td>2</td>
</tr>
</tbody>
</table>

The Freshman year of study is a common year, including the same courses for students whether they intend to follow a Bachelor of Music program or a Bachelor of Music Education program. The year is devoted to courses from the basic music core requirements, General Studies courses, to include Mus. 200 (Music in General Culture), a special section of which is provided for music majors and minors, and ensemble participation and applied study on the student’s major instrument.

A typical Freshman course of study might be:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. 100-101 or 102-103, Class Piano</td>
<td>1 1</td>
</tr>
<tr>
<td>Mus. 141-142, Theory I, Writing and Analysis Techniques</td>
<td>3 3</td>
</tr>
<tr>
<td>Mus. 143-144, Theory I, Aural Perception and Analysis</td>
<td>1 1</td>
</tr>
</tbody>
</table>
Mus. 175, Music as a Profession 1
Mus. 200, Music in General Culture 3
Applied Music Major 2
Eng. 101-102, Reading and Composition 3
General Studies electives 3

16 plus ensemble credit

BACHELOR OF MUSIC

The Bachelor of Music degree is designed for students who possess exceptional talent in applied music or in theory and composition and who desire to continue their musical training in graduate programs which will prepare them for a professional career in performance, composition, and/or teaching at the college level.

At the end of the common first year of music study, students will have had the opportunity to apply for admission into the Bachelor of Music program and will be evaluated on the basis of performance talent and promise for future success as a performer, college-level teacher, or composer.

ADDITIONAL REQUIREMENTS OF SPECIFIC CONCENTRATIONS

VOICE CONCENTRATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. 120, Diction for Singers</td>
<td>1</td>
</tr>
<tr>
<td>Mus. 318, Intermediate Choral Conducting</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 443, Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 449, Advanced Music Analysis</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 467, Solo Vocal Literature</td>
<td>3</td>
</tr>
<tr>
<td>Mus. 477-478, The Teaching of Voice</td>
<td>4</td>
</tr>
<tr>
<td>Mus. 495, Senior Graduation Recital</td>
<td>1</td>
</tr>
<tr>
<td>Applied voice study</td>
<td>22</td>
</tr>
<tr>
<td>Applied keyboard study (piano and/or organ)</td>
<td>6</td>
</tr>
<tr>
<td>Voice concentration credits</td>
<td>43</td>
</tr>
<tr>
<td>Basic Music Core credits</td>
<td>27</td>
</tr>
<tr>
<td>Fr. 101-102 or 231-232</td>
<td>8 or 6</td>
</tr>
<tr>
<td>Ger. 101-102 or 231-232</td>
<td>8 or 6</td>
</tr>
<tr>
<td>General Studies courses 43 cr.; 3 cr. elective</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>128-132</td>
</tr>
</tbody>
</table>

plus ensembles

Additional Requirements:
- Major ensemble (six semesters)
- Opera Workshop (two semesters)

Music 161
PIANO CONCENTRATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. 318 or 319</td>
<td>Intermediate Choral or Instrumental Conducting</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 443-444</td>
<td>Counterpoint</td>
<td>4</td>
</tr>
<tr>
<td>Mus. 449-450</td>
<td>Advanced Music Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Mus. 464</td>
<td>Piano Literature</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 473</td>
<td>Private Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 474</td>
<td>Group and Class Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 495</td>
<td>Senior Graduation Recital</td>
<td>1</td>
</tr>
<tr>
<td>Applied piano study</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Applied voice study</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Applied organ study</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Piano concentration credits</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td>Basic Music Core credits</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Fr. 105-106 or 205-206, or equivalent</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Ger. 105-106 or 205-206, or equivalent</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>General Studies courses 43 cr.;</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>3 cr. elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
</tr>
</tbody>
</table>

Additional Requirements:
- Major ensemble (first year)
- Keyboard Performance Practicum (six semesters)

ORGAN CONCENTRATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. 318 or 319</td>
<td>Intermediate Choral or Instrumental Conducting</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 443-444</td>
<td>Counterpoint</td>
<td>4</td>
</tr>
<tr>
<td>Mus. 449-450</td>
<td>Advanced Music Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Mus. 468</td>
<td>Organ Literature</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 469</td>
<td>Church Music</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 495</td>
<td>Senior Graduation Recital</td>
<td>1</td>
</tr>
<tr>
<td>Applied organ study</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Applied music (minor studies)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Organ concentration credits</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>Basic Music Core credits</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Fr. 105-106 or 205-206, or equivalent</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Ger. 105-106 or 205-206, or equivalent
General Studies courses 43 cr.;
3 cr. elective
Total 128
plus ensembles

Additional Requirements:
Major ensemble (first year)
Keyboard Performance Practicum (six semesters)

INSTRUMENTAL CONCENTRATION

Credit Hours
Mus. 319, Intermediate Instrumental Conducting 2
Mus. 443-444, Counterpoint
or
Mus. 449-450, Advanced Music Analysis 4
Mus. 472, Instrumental Pedagogy 1
Chamber ensembles (in addition to the 8 semester major ensemble requirement) 6
Mus. 495, Graduation Recital 1
Advanced music literature elective 3
Mus. 463, Twentieth-Century Music 3
Applied music (may all be in one area of performance or divided between a major instrument, 22 cr. minimum, and minor instruments, 0-6 credits.) 28
Foreign language or music electives 7
Instrumental concentration credits 55
Basic Music Core credits 27
General Studies courses 43 cr.;
3 cr. electives 46
Total 128
plus major ensembles

BACHELOR OF MUSIC EDUCATION

The Bachelor of Music Education degree is designed primarily for those preparing to teach instrumental or vocal music in the public schools. At the end of the common first year of study, students will have the opportunity to apply for admission into the Bachelor of Music Education program, and will be evaluated in regard to their musical potential.

In addition to qualifying students for certification to teach in the public schools of Virginia and most other states, the broad background
of the Bachelor of Music Education degree is also applicable to church music, private music teaching, work in the music industry, and graduate music study.

Students desiring certification in both instrumental and vocal music must complete the requirements of both concentrations, with the following modifications: Voice majors must complete a minor in an orchestral instrument and will not be required to take MuEd. 106, Instrument Familiarization. Instrumental majors must complete a voice minor, which will replace the requirement of MuEd. 104, Vocal Techniques. Keyboard majors will not be required to take MuEd. 106, Instrument Familiarization, or MuEd. 104, Vocal Techniques, since they must have a minor in each of those areas. Double certification will add approximately 20 credits to the student’s program.

Students in Bachelor of Music Education programs must complete the following common professional education sequence for teacher certification:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Psyc. 233-234, Human Growth and Development</td>
</tr>
<tr>
<td>3</td>
<td>Educ. 360, Foundations of Curriculum</td>
</tr>
<tr>
<td>3</td>
<td>Educ. 470, History and Philosophy of Educational Thought</td>
</tr>
<tr>
<td>8</td>
<td>Educ. 480, Directed Teaching</td>
</tr>
<tr>
<td>2</td>
<td>Hth. 370, The School Health Program</td>
</tr>
<tr>
<td>22</td>
<td>Hist. 233 or 234, U.S. History, must be taken as part of the General Studies program.</td>
</tr>
<tr>
<td></td>
<td>MuEd. 481, Seminar for Student Teachers in Music, is recommended.</td>
</tr>
</tbody>
</table>

**VOCAL CONCENTRATION**

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mus. 120, Diction for Singers</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 318, Intermediate Choral Conducting</td>
</tr>
<tr>
<td>4</td>
<td>Mus. 441-442, Music Arranging</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 477, The Teaching of Voice</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 473 or 474, Piano Pedagogy</td>
</tr>
<tr>
<td>15</td>
<td>Applied music major (voice or keyboard)</td>
</tr>
<tr>
<td>5</td>
<td>Applied music minor (keyboard or voice)</td>
</tr>
<tr>
<td>2</td>
<td>MuEd. 106, Instrument Familiarization</td>
</tr>
</tbody>
</table>

164 Music
MuEd. 380, Music in the Elementary School  
  Vocal concentration credits 33  
  Basic Music Core credits 27  
SeEd. 371D, Junior High School Music 2  
SeEd. 371E, Choral Methods 2  
Professional Education sequence common to all programs in teacher education 22  
General Studies 43 cr.; elective 3 cr. 46  
Total 132 credits plus ensembles

Ensemble requirement for keyboard majors will be met by Piano Accompanying and Ensemble (two semesters) in the third year. Vocal majors may elect Opera Workshop for one year of major ensemble credit.

INSTRUMENTAL CONCENTRATION  

<table>
<thead>
<tr>
<th>Credit</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MuEd. 305, Brass Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MuEd. 306, Woodwind Techniques</td>
<td>1</td>
</tr>
<tr>
<td>Applied music (major instrument)</td>
<td>15</td>
</tr>
<tr>
<td>Applied music (minor instruments) (a keyboard major must elect an applied minor of 5 hours on one orchestral instrument)</td>
<td>5</td>
</tr>
<tr>
<td>MuEd. 104, Vocal Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MuEd. 105, Percussion Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MuEd. 107-108, String Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MuEd. 319, Intermediate Instrumental Conducting</td>
<td>2</td>
</tr>
<tr>
<td>Mu. 441-442, Music Arranging</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental concentration credits 33</td>
<td></td>
</tr>
<tr>
<td>Basic Music Core credits 27</td>
<td></td>
</tr>
<tr>
<td>SeEd. 371F and G Instrumental Methods and Administration 6</td>
<td></td>
</tr>
<tr>
<td>Professional education sequence common to all programs in teacher education 22</td>
<td></td>
</tr>
<tr>
<td>General Studies 43; free elective 3 46</td>
<td></td>
</tr>
<tr>
<td>Total 134 credits plus ensembles</td>
<td></td>
</tr>
</tbody>
</table>

Third year ensemble requirement will be met by keyboard majors with Piano Accompanying and Ensemble (two semesters). Although wind and percussion majors are required to participate in Marching Band for a minimum of two years (Marching Band is the first semester of College Band each year), participation every year is recommended.
MUSIC MINOR

The Music Minor program requires 30 semester hours in music courses in addition to the General Studies requirement of Mus. 200 (Music in General Culture), a special section of which is provided for majors and minors, or Mus. 201 (Introduction to Music Literature). The 30 hours include:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Mus. 100-101 or 102-103, Class Piano</td>
</tr>
<tr>
<td>6</td>
<td>Mus. 141-142, Theory I, Writing and Analysis Techniques</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 143-144, Theory I, Aural Perception and Analysis</td>
</tr>
<tr>
<td>6</td>
<td>Mus. 265-266, Music History</td>
</tr>
<tr>
<td>2 or more</td>
<td>credits chosen from:</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 441-442, Music Arranging; Mus. 443-444, Counterpoint;</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 463, Twentieth-Century Music</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 317, Basic Conducting</td>
</tr>
<tr>
<td>4</td>
<td>Applied Music</td>
</tr>
<tr>
<td>4</td>
<td>Ensembles and/or additional applied study</td>
</tr>
<tr>
<td>30</td>
<td>Total</td>
</tr>
</tbody>
</table>

The Minor in Music does not qualify a student to teach music in the public schools of Virginia.

MUSIC CONCENTRATION FOR ELEMENTARY EDUCATION MAJORS

For students majoring in Elementary Education who desire a concentration program in music, the following courses, totaling 24 semester hours, are recommended:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Mus. 200, Music in General Culture (a General Studies option)</td>
</tr>
<tr>
<td>3</td>
<td>MuEd. 375, Music for Children</td>
</tr>
<tr>
<td>6</td>
<td>Mus. 141-142, Theory I, Writing and Analysis Techniques</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 143-144, Theory I, Aural Perception and Analysis</td>
</tr>
<tr>
<td>2</td>
<td>Mus. 317, Basic Conducting</td>
</tr>
<tr>
<td>4</td>
<td>Applied music</td>
</tr>
<tr>
<td>4</td>
<td>Ensembles and/or additional applied study</td>
</tr>
<tr>
<td>24</td>
<td>Total</td>
</tr>
</tbody>
</table>

Description of Courses

Undergraduate courses, and those open to both undergraduate and graduate students, follow in the sequence, Music, Music Education, and Applied Music (lessons and ensembles). Courses open only to graduate students are listed in the Graduate Catalog.
Music

MUS. 100-101. **Class Piano**, 1 credit each semester.

For the beginning pianist (instrumental or vocal majors). This course is designed for all functional uses of the piano in teaching situations. Keyboard skills include sight-reading, transposition, harmonization, improvisation, playing by ear, and improvising vocal/instrumental solo accompaniments.

MUS. 102-103. **Class Piano**, 1 credit each semester.

An advanced approach to development of keyboard skills and functional piano for those with previous piano experience. Placement in these sections is determined by audition. Included is practice in all skills covered in 100-101; however, a more advanced level of proficiency is expected.

MUS. 120. **Diction for Singers**, 1 credit.

The study of French, German, Italian, and English pronunciation using the phonetic alphabet with emphasis on the performance of song literature in each language.

MUS. 141-142. **Theory I, Writing and Analysis Techniques**, 3 credits each semester.

Music scale construction, rhythm, and interval work, melody writing, and a study of triads, inversions, primary and secondary chords, embellishments, modulation to closely related keys, and musical form and analysis. *To be taken concurrently with Mus. 143-144.*

MUS. 143-144. **Theory I, Aural Perception and Analysis (0, 3)**, 1 credit each semester.

A coordinated laboratory course with Mus. 141-142 encompassing sight singing and ear training. Involves music reading and aural perception in unison and parts, dictation, error detection and analytical listening. Programmed tape instruction supplements in-class drill. *To be taken concurrently with Mus. 141-142.*

MUS. 175. **Music as a Profession**, 1 credit.

An overview of music careers. Examines undergraduate majors and degree programs, and preparation for graduate school.

MUS. 200. **Music in General Culture**, 3 credits.

This course is designed to increase the student’s perceptual ability in listening to music and to encourage an interest in both familiar and unfamiliar music. Primary study will be of music from the classic, Western heritage. Folk, jazz, popular and non-Western musics will also be considered. A special section is provided for music majors.

MUS. 201. **Music and Man in Western Culture**, 3 credits.

A one-semester survey of the history of music and its purpose in Western cultures. Designed for the student with some previous musical experience, but not open to music majors.

MUS. 202. **Black, Jazz, and Related American Music**, 3 credits.

Designed to increase the student’s perceptual ability in listening to music, with emphasis on Black music, jazz, soul and rock with relation to its history, and its evolution in America. An interest and openness to both familiar and unfamiliar music will be encouraged, with consideration given to music of the classic Western heritage and twentieth-century music.
MUS. 241-242.  Theory II, Writing and Analysis Techniques, 3 credits each semester.

Continuation of Mus. 142; advanced writing, form and analysis in chromatic and contemporary harmonic techniques. To be taken concurrently with Mus. 243-244. Prerequisite: Final grade of "C" or higher in Mus. 142. (Mus. 241 is prerequisite to 242.)

MUS. 243-244.  Theory II, Aural Perception and Analysis (0, 3), 1 credit each semester.

A coordinated laboratory course with Mus. 241-242 encompassing sight singing and ear training. Involves music reading and aural perception in unison and parts, dictation, error detection and analytical listening. Programmed tape instruction supplements in-class drill. To be taken concurrently with Mus. 241-242.

MUS. 251-252.  Music Composition, 2 credits each semester.

Fundamentals of music composition with relation to 20th century techniques commencing with modal, pentatonic, and whole-tone scale resources and moving forward chronologically. Theory and composition majors meet privately with instructor one half-hour per week, in addition to class instruction. (Mus. 251 is prerequisite to 252.)

MUS. 265-266.  Music History, 3 credits each semester.

The development of western music from Gregorian chant to the present. Prerequisites: Mus. 200, Mus. 141-142. Mus. 265 is not prerequisite to Mus. 266.

MUS. 317.  Basic Conducting, 2 credits.

Designed to acquaint the student with the fundamental elements of conducting technique, such as beat patterns, cueing, expression, transposition, and score reading. Emphasis on applying these techniques in practical conducting experiences involving vocal and instrumental forces. Prerequisites: MuEd. 104 or MuEd. 106 or permission of instructor.

MUS. 318.  Intermediate Choral Conducting, 2 credits.

Consists of the further application of basic conducting skills learned in Mus. 317 to the choral situation with emphasis on baton technique, score reading and preparation, and introduction to choral literature. Prerequisite: Mus. 317.

MUS. 319.  Intermediate Instrumental Conducting, 2 credits.

A continuation of basic conducting to develop skills in baton technique with emphasis on advanced literature for public school use. Includes score sight reading skills and literature selection. Prerequisite: Mus. 317.

MUS. 351-352.  Music Composition, 2 credits each semester.

Intermediate level of music composition with relation to 20th century techniques utilizing synthetic and duodecuple scale, polytonal, polychordal and tone-row resources. Theory and composition majors meet privately with instructor one half-hour per week in addition to class instruction. Prerequisite: Mus. 252.

MUS. 355-356.  Orchestration, 2 credits each semester.

Arranging for ensembles, bands and orchestras. (Mus. 355 is prerequisite to Mus. 356.)

MUS. 441-442.  Music Arranging, 2 credits each semester.

Arranging for instrumental and vocal ensembles including chorus, band and orchestra. (Mus. 441 is prerequisite to 442.)
MUS. 443-444. Counterpoint, 2 credits each semester.

Tonal counterpoint. Two, three and four voice forms, florid counterpoint. Elementary imitative techniques. Form analysis. Prerequisites: Mus. 242. Mus. 443 is prerequisite to Mus. 444.

MUS. 449-450. Advanced Music Analysis, 2 credits each semester.

Analytical investigation of musical examples in a variety of forms, accomplished in a chronological fashion, to achieve a deeper comprehension of the stylistic and compositional evolution of music. (Courses may be taken in sequence or separately.) Prerequisite: Mus. 242, and 244.

MUS. 451-452. Music Composition, 2 credits each semester.

Advanced level of music composition with relation to 20th century techniques utilizing serial, aleatoric and electronic music resources. Theory and composition majors meet privately with instructor one half-hour per week in addition to class instruction. Prerequisite: Mus. 352.

MUS. 463. Twentieth Century Music, 3 credits.

A survey of the trends found in twentieth century music. Impressionism; "New Music" from Satie through Schoenberg, Bartok, Xenakis and Pendrescki. The music of contemporary American composers. Prerequisite: Permission of instructor.

MUS. 464. Piano Literature from the 18th Century to 1950, 2 credits.

A study of solo piano literature from the 18th century to 1950, requiring performance by the class. For undergraduate keyboard majors, but others with sufficient keyboard technique may be admitted at the discretion of the instructor.

MUS. 467. Solo Vocal Literature, 3 credits.

A survey of specific areas of vocal literature to include the Early English Air, Classic Italian Art Songs, the German Lied, the French Art Song, Contemporary Art Song, Opera, and Oratorio.

MUS. 468. Organ Literature, 2 credits.

A survey of organ literature from 1600 to the present. Emphasis will be placed on style characteristics of each historical era with some demonstration at the organ where appropriate. (Formerly Mus. 470.)

MUS. 469. Church Music, 2 credits.

A course for organists, designed to develop the practical skills required of a church musician. Study and performance of hymns, solo and anthem accompanists, the liturgies of major religious denominations, and selected service music for the church year. This course will require that the student have proficiency on the instrument to the level of Organ 325 or the equivalent.

MUS. 472. Instrumental Pedagogy, 1 credit.

Presentations of instrumental methods, solo and ensemble literature related to the instrumental performer's own major area. Private instruction approaches and techniques are also considered with particular reference to the beginning player. (Class meeting to be arranged.)

MUS. 473. Private Piano Pedagogy, 2 credits.

Procedures and materials for the teaching of private piano, especially elementary and intermediate piano solo and ensemble literature for children, are emphasized. The problems of the adult beginner are studied.
MUS. 474. Group and Class Piano Pedagogy, 2 credits.

Focus on methodology, practice, and materials for group/class piano teaching in private studio or public schools. Emphasis on beginning through intermediate levels of instruction. Student participation in group teaching experiences and experimentation with teaching techniques and materials under consideration.

MUS. 477-478. The Teaching of Voice, 2 credits each semester.

Designed to acquaint the prospective voice teacher with a variety of reputable techniques based on scientific fact and a variety of styles and interpretation. Also included is a survey of languages and vocal literature for teaching.

MUS. 490. Special Studies in Music, 1-3 credits each semester.

This course is designed to give superior music students an opportunity to do independent study under faculty supervision. This study may be in the area of music literature or music education. 

Permission to enroll must be secured from the Head of the Department.

MUS. 495. Senior Graduation Recital, 1 credit.

For all Bachelor of Music candidates in performing degree programs. Presentation of a full recital, quality of performance to meet standards for admission to graduate school Master of Music programs. Memorized recital presentations will be required in those areas which traditionally demand them.

MUS. 498. Selected Topics in Music, 1-3 credits.

Courses in music or music education which are of a topical nature.

MUS. 499. Honors, 6 credits. Year Course.

MUS. 560. Keyboard Literature, 2 credits.

An examination of representative works of the High Baroque, Classical and Romantic Periods and the new directions of the Twentieth Century, for the major keyboard instruments. Does not require keyboard proficiency.

MUS. 564. Symphonic Literature, 3 credits.

Symphonic Literature—A historical survey of symphonic literature concentrating primarily on majors composers and compositions from Baroque to present.

MUS. 575. Group and Class Piano Pedagogy, 2 credits.

A focus on methodology, educational practice and musical issues as they might apply to teaching intermediate and advanced students in performance within the small group setting and the piano class for advanced keyboard skill development, in the private studio, public schools, or on the college level.

MUS. 576. Music Theory Pedagogy, 3 credits.

A review of traditional theory practices with relation to classroom instruction. Theory texts and unique approaches are critiqued in relation to current trends in music.

Music Education

MUED. 104. Vocal Techniques, 2 credits.

This course is designed to acquaint the instrumental music major with fundamentals of vocal techniques including posture and breath support, basic voice production, singers diction, vocal exercises, and individual as well as ensemble performance.
MUED. 105. Percussion Techniques, 1 credit.
Class instruction is given in the three basic areas of percussion, snare drum, timpani, and keyboard percussion, and is given in the secondary areas of marching band percussion, traps and drum set. Skill development expectations are the intermediate level on snare drum and the elementary level on other instruments.

MUED. 106. Instrument Familiarization, 2 credits.
Course is designed to give non-instrumental music majors a conceptual background on tone production and acoustics of the strings, woodwind, brass and percussion families. Basic instrumental characteristics and history will be included.

MUED. 107-108. String Techniques, 1 credit each semester.
Instruction in the basic skills in playing and teaching string instruments. Instruction will be on violin, viola, cello, and bass in a heterogeneous class situation. Various methods for string teaching will be studied, and materials used in public school teaching will be examined and performed.

MUED. 305. Brass Techniques, 1 credit.
Instruction in basic skills of performance and instruction on brass instruments. Includes methods and materials for public school use and basic minimal repair skills.

MUED. 306. Woodwind Techniques, 1 credit.
Instruction in basic skills of performance and instruction on woodwind instruments; includes methods and materials for public school use and minimal repair skills.

MUED. 375. Music for Children (3, 2), 3 credits. Elementary Education Majors only.
A study of the musical responses and needs of elementary school children and of appropriate musical experiences within the elementary classroom, K-6. Course includes study of elementary music textbooks, appropriate listening experiences, use of the keyboard, the recorder, autoharp, and classroom rhythm instruments.

The general music program in the elementary school is presented for future music specialists, K-6. Synthesis of current philosophy, learning theories, and educational practices for teaching elementary school music. Preparation for organizing music curricula and daily lesson plans included. Prerequisites: Psyc. 233-234.

MUED. 471. Musical Show Production, 2 credits.
The technical aspects of staging musicals, operettas, and opera; consideration of lighting, makeup, and scenery, as well as coaching concepts and techniques related to dramatic as well as to musical problems in individual and ensemble performance.

MUED. 481. Seminar for Student Teachers, 1 credit upon completion of two eight-week sessions, preferably 1 prior to and 1 following Educ. 480, Student Teaching.
Strengthens the Student Teaching experience by (Session I, prior to Educ. 480) familiarizing students with procedures, material, curricula, and facilities; and (Session II, following Educ. 480), giving students the opportunity to relate theoretical learning to the actual teaching experiences.

MUED. 501. Workshops in Music Education, 1-3 credits.
Designed to provide a variety of workshop experiences, many workshops are particularly appropriate for teachers in elementary and secondary schools. The content of each workshop will be determined by interest and demand. MuEd. 501A, Virginia Music Workshop and Camp at Massanetta Springs, is available for 1 credit each June for those
at the camp who devote a minimum of 30 hours to classes, study and observation, and write a summary paper. MuEd. 501A and MuEd. 502-506 may be taken concurrently. For other workshops, see the Schedule of Classes for current offerings.

Two-Week June Courses, MuEd. 502-506.

Teachers who attend the Virginia Music Workshop and Camp at Massanetta Springs, and wish to also pursue an independent study under college supervision and for college credit, may register with James Madison University at the Music Camp, and consult with a university supervisor at that time in the selection of a research topic. (See MuEd. 502-506 below for categories available). During the week following Music Camp, students will be on the university campus in study and in seminars; additional one-week workshops will also be offered. Dormitory and dining hall facilities will be available for the week on the campus.

MuEd. 502. Topics in Choral Techniques and Literature, 2 credits.
MuEd. 503. Topics in Instrumental Techniques and Literature, 2 credits.
MuEd. 504. Topics in Pedagogy of Music Theory and Literature, 2 credits.
MuEd. 505. Topics in Elementary School Music, 2 credits.
MuEd. 506. Topics in Music for Atypical Children, 2 credits.

APPLIED MUSIC INSTRUCTION

Private and/or group applied lessons are basic areas of study for all music majors and minors. All other students, including freshmen and transfer students entering in an UNDECLARED major status, who desire applied instruction will be accommodated after declared majors and minors have been scheduled and if time permits. Permission to register must be obtained from the coordinator of the respective applied area.

Applied areas of study:

Voice
Piano
Organ
Harpsichord
Violin
Viola
Violoncello
String Bass
Flute
Oboe
Clarinet
Bassoon
Saxophone
Trumpet
Horn
Trombone
Euphonium
Tuba
Percussion

SMALL GROUP LESSONS

MUAP. 113-114 (first year); 213-214 (second year); 313-314 (third year); 413-414 (fourth year). One hour class meeting per week. One credit each semester.
PRIVATE LESSONS

MUAP. 115-116 (first year); 215-216 (second year); 315-316 (third year); 415-416 (fourth year). One half-hour lesson a week. Five hours minimum practice per week. One credit each semester.

MUAP. 125-126 (first year); 225-226 (second year); 325-336 (third year); 425-426 (fourth year). Two half-hour lessons a week. Ten hours minimum practice per week. Two credits each semester.

MUAP. 135-136 (first year); 235-236 (second year); 335-336 (third year); 435-436 (fourth year). Two half-hour lessons a week. Fourteen hours minimum practice per week. Three credits each semester.

MUAP. 245-246 (second year); 345-346 (third year); 445-446 (fourth year). Two half-hour lessons a week. Eighteen hours minimum practice per week. Four credits each semester.

MUAP. 511, 512, 513, 514 (for undergraduates past the 8th term of study, and for graduate study on a minor instrument). One half-hour lesson a week. Five hours minimum practice per week. One credit each semester.

Music Ensembles

For information regarding ensemble participation and auditions, students should contact the Music Department Office, Duke M-102.

COLLEGE BAND 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Open to all interested participants. Admission is by audition. A wide variety of music is utilized to acquaint the student with the different kinds of band literature. The Band will concentrate on marching activities during the first semester and on concert repertoire in the second semester. Required for 2 years of wind and percussion majors in the B.M.Ed. program.

CHAMBER MUSIC 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Chamber music study is required of all string majors and is to be considered an integral part of their applied music course. Trios and quartets of Haydn, Mozart, Beethoven, Mendelssohn, Schubert, Tschaikowsky, Dvorak. Quintets of Mozart, Schumann, Brahms, Franck and others. Contemporary works. Other chamber music combinations may be formed as need arises.

CHORUS (mixed) 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Acquaints students with a variety of choral music, including much that is suitable for use with school groups, and through the singing of this to develop choral techniques and general musicianship. Students may participate in this ensemble without audition. However, the director reserves the right to determine its membership.

COLLEGE CHORALE 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

This highly selected, 60-voice mixed choir performs repertoire from the Renaissance to the contemporary era, both sacred and secular. There is opportunity to perform on and off campus, including an annual Spring Tour. Three rehearsals per week.
CONCERT CHOIR (women) 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

This 45-voice women’s choir performs a wide variety of literature, sacred and secular, from the Renaissance to the present. Performances are on and off the campus; including an annual Spring Tour. Three rehearsals per week.

ORCHESTRA 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

The James Madison University Community Symphony Orchestra is a participating member of the American Symphony Orchestra League. Membership draws from both university and community resources and performs two concerts per semester. Membership is determined by audition and is open to non-music majors; two rehearsals per week.

THE MADISON SINGERS 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

The Madison Singers, a group of 16 to 20 members, is a highly specialized vocal organization. Membership is by audition. The repertoire is widely varied from early madrigals to popular music.

COLLEGE JAZZ ENSEMBLE 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Instrumental ensembles, containing sub-groups, performing the standard and contemporary repertoire of American Music with emphasis on the jazz idiom. Open to all James Madison University students who have sufficient ability to play the repertoire.

WOODWIND ENSEMBLES 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

The Wind Ensembles, consisting of Woodwind Quintets and other smaller and larger combinations, are limited to specially selected personnel through auditions. Concerts and other performances are prepared from a variety of literature from the Classical Period to the present.

CHAMBER ORCHESTRA 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Open to any string player by audition. Performance of string literature not otherwise available in a full orchestra. Clinics and public school performances are provided as well as opportunities to perform with selected wind performers in small ensembles. String majors are encouraged to participate.

WIND ENSEMBLE 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

The Wind Ensemble is a smaller concert band ranging from 45 to 50 members. The ensemble is open, by audition at the beginning of each Fall semester, to all wind and percussion students attending James Madison University.

COLLEGE JAZZ BAND 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Instrumental ensembles, containing sub-groups, performing the standard and contemporary repertoire of American Music with emphasis on the jazz idiom. Open to all James Madison University students who have sufficient ability to play the repertoire.
BRASS ENSEMBLE 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Brass Ensemble is open to qualified brass players through audition. The size of ensemble may range from 3 up to 15 or more players. Literature for brass ensemble from the Baroque era is covered.

OPERA WORKSHOP 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

The preparation and public performance of grand or light opera. Includes coaching of both music and acting.

PIANO ACCOMPANYING AND PIANO ENSEMBLE 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

Piano majors in the B.M.Ed. program will perform in a one-hour ensemble class each week, and are assigned to vocal or instrumental studios for accompanying experience equal to one hour per week. They will devote a minimum of one hour per week to preparation of these assignments. Required for two semesters.

KEYBOARD PERFORMANCE PRACTICUM: PIANO 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

A studio course in chamber music performance to be conducted in master class style. Required of B.M. piano majors for six semesters. Following a first year experience in a major performing ensemble, these practica will constitute the remainder of the B.M. student's ensemble requirement; available as an elective in the first year. Open to other qualified students with permission of the instructor.

KEYBOARD PERFORMANCE PRACTICUM: ORGAN 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

A studio course in chamber music performance to be conducted in master class style. Required of B.M. organ majors for six semesters. Following a first year experience in a major performing ensemble, these practica will constitute the remainder of the B.M. student's ensemble requirement; available as an elective in the first year. Open to other qualified students with permission of the instructor.

VOCAL JAZZ CHOIR 109-110 (first year); 209-210 (second year); 309-310 (third year); 409-410 (fourth year). 3 periods a week; 1 credit each semester.

A group performing vocal jazz literature and other contemporary American repertoire. Open to all James Madison University students who have sufficient ability.
DEPARTMENT OF PHILOSOPHY AND RELIGION

Dr. William E. Callahan, Head of the Department

Professors Callahan, Sweigart, and Thomas; Associate Professor O’Meara; Assistant Professor Wiles.

Two majors and two minors are offered by the Philosophy and Religion Department: a major in philosophy and a combined major in philosophy and religion. Minors are offered in both philosophy and religion. Both major programs lead to the Bachelor of Arts degree.

The majors and minors in philosophy and in philosophy and religion are designed to meet the needs of the following: (1) those who wish to derive the broadest liberal education through the study of either philosophy or religion, but have no professional interest in the fields; (2) those who desire a broadly conceived liberal education preparatory to graduate study in a field other than either philosophy or religion; (3) those who, by reason of professional interests in either philosophy or religion, plan to do graduate work in these fields.

The courses offered in philosophy and religion are designed primarily to provide students with sound principles and critical thinking, to help them acquire knowledge of the development and problems of philosophic and religious thought, and to lead them to formulate an intelligent view of the meaning and value of life in terms of their own experiences. Any of the department’s 200-level courses may be taken to fulfill the humanities requirement in the General Studies Program of the college.

The study of these fields provides a broad understanding of a truly liberal education. In addition, students have found that such an education serves as a helpful and useful background for a variety of careers, including business, teaching, medicine, theology, government service, public relations, and many others.

A major program in philosophy consists of a minimum of 30 hours in philosophy including the following required courses: Phil. 240 (Introduction to Philosophy), Phil. 250 (Introductory Logic), Phil. 340 (Ancient and Medieval Philosophy), Phil. 341 (Modern Philosophy), Phil. 420 (Studies in Major Philosophers) or Phil. 460 (Advanced Problems in Philosophy).

A major program in philosophy and religion consists of a minimum of 36 hours approved by the Department Head. A philosophy and reli-
gion major is required to have 7 courses in philosophy and 5 courses in
religion including the following: Phil. 240 (Introduction to Philosophy),
Phil. 250 (Introductory Logic), Phil. 340 (Ancient and Medieval Philos-
ophy), Phil. 350 (Philosophy of Religion), and three 400-level electives;
Rel. 201 (Introduction to the Literature and Religion of the Old Testa-
ment) or Rel. 202 (Introduction to the Literature and Religion of the
New Testament), Rel. 200 (Introduction to the Study of Religion), Rel.
440 (Major Religious Thinkers) or Rel. 460 (Issues in Religious
Thought), and two electives.

Requirement for minor in philosophy: a minimum of 18 semester
hours in philosophy, including Phil. 240 (Introduction to Philosophy),
Phil. 250 (Introductory Logic), Phil. 340 (Ancient and Medieval Philos-
ophy) or Phil. 341 (Modern Philosophy); and 3 electives which may in-
clude Rel. 210 (Religions of the World), approved by the Head of the
Department.

Requirement for minor in religion: a minimum of 18 semester
hours in religion, including Rel. 201 (Introduction to the Literature and
Religion of the Old Testament) or Rel. 202 (Introduction to the Litera-
ture and Religion of the New Testament), Rel. 200 (Introduction to the
Study of Religion), Rel. 210 (Religions of the World); and three elec-
tives, which may include Phil. 350 (Philosophy of Religion), approved
by the Head of the Department.

**MAJOR IN PHILOSOPHY**
(B.A. Degree)

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**Philosophy and Religion** 177
### MAJOR IN PHILOSOPHY AND RELIGION
(B.A. Degree)

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<th><strong>Freshman Year</strong></th>
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**Description of Courses**

**Philosophy**

**PHIL. 240.** *Introduction to Philosophy,* 3 credits.

An introduction to the basic problems and concepts of philosophy—the nature of man and the self, ethics, theories of knowledge, philosophy of religion, etc.—as revealed in the writings of major philosophers.

**PHIL. 250.** *Introductory Logic,* 3 credits.

A critical examination of the formal principles of sound reasoning. *No prerequisite.*

**PHIL. 260.** *Philosophy and Contemporary Life,* 3 credits.

The application of philosophical principles to contemporary life. *No prerequisite.*

**PHIL. 290.** *Topics in Philosophy,* 1-3 credits.

A study of selected topics in philosophy at the lower division level. *No prerequisite. May be repeated for credit.*

**PHIL. 330.** *Ethics,* 3 credits.

The nature of ethical discourse, and an examination of selected ethical problems posed in philosophical literature from Plato to the present. *Prerequisite: Phil. 240 or permission of instructor.*

178  *Philosophy and Religion*
PHIL. 335. Problems in Medical Ethics, 3 credits.
A discussion of important moral issues in modern medicine and the life sciences, such as abortion, birth control, euthanasia, genetic control, etc. No prerequisite.

PHIL. 340. Ancient and Medieval Philosophy, 3 credits.
An examination of the writings of major philosophers from Thales to Aquinas. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 341. Modern Philosophy, 3 credits.
An examination of the basic philosophic tendencies in the period from the Renaissance through the nineteenth century. Emphasis will be placed on the major philosophers from Descartes to Nietzsche. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 344. Existentialism, 3 credits.
An examination of existentialism and its major spokesmen, including such authors as Kierkegaard, Nietzsche, Sartre, Camus, Marcel and Heidegger. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 350. Philosophy of Religion, 3 credits.
An intensive examination of religion from the standpoint of philosophical thinking, with particular emphasis upon the way philosophers view such problems as the existence of God, evil, immortality, religious language, etc. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 360. Philosophy and Modern Literature, 3 credits.
In this course philosophical problems are arrived at inductively through a detailed study of contemporary literary works. Authors treated include Ionesco, Camus, Sartre, Marcel, Huxley, Eliot, Barth, and others. May be counted toward a major in English. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 370. American Philosophy, 3 credits.
A study of the main philosophical ideas in America, especially pragmatism, with particular emphasis being given to Peirce, James, Royce, Dewey, and Whitehead. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 380. Social Philosophy, 3 credits.
A study of the major social and political philosophies both classical and contemporary. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 390. Philosophy of Science, 3 credits.
An intensive examination of the basic philosophical problems raised by scientific inquiry in the natural and social sciences. Consideration will be given to fundamental concepts and problems in the sciences and their relation to society. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 410. Symbolic Logic, 3 credits.
The study and application of the principles and techniques of modern deductive logic to natural language. Also, examination of the properties of formal systems and of the logical implications and paradoxes of language. Prerequisite: Phil. 250 or permission of the instructor.

PHIL. 420. Studies in Major Philosophers, 3 credits.
Reading and discussion of the chief writings of one or two of the major persons in the history of philosophy, such as: Plato, Aristotle, Aquinas, Descartes, Hume, Kant, Kierkegaard, and Wittgenstein. Prerequisite: Phil. 240 or permission of instructor.
PHIL. 430. Analytic Philosophy, 3 credits.

An examination of the origins and development of contemporary philosophical analysis, with special attention given to the nature and uses of language. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 440. Professional Ethics, 3 credits.

An analysis and discussion of significant, contemporary ethical issues and problems existing throughout the various fields of professional work. No prerequisite.

PHIL. 450. Theory of Knowledge, 3 credits.

An extensive examination of theories of knowledge; philosophical problems concerning knowledge and belief. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 460. Advanced Problems in Philosophy, 3 credits.

An advanced study of some of the major issues encountered in the mainstream of philosophic thought. Prerequisite: Phil. 240 or permission of instructor.

PHIL. 490. Special Studies in Philosophy, 3 credits.

Designed to give able students an opportunity to do independent study in philosophy under faculty supervision. Prerequisite: Permission of Department.

PHIL. 499. Honors, 6 credits. Year Course.

Religion

All courses in religion are offered on an elective and non-sectarian basis.

REL. 200. Introduction to the Study of Religion, 3 credits.

The exploration of several religious perspectives and ways of thinking about religious themes. Topics may include revelation, mysticism, myth, ritual, forms of theism, and religious experience. (Formerly Rel. 330.)

REL. 201. Introduction to the Literature and Religion of the Old Testament, 3 credits.

A study of the foundation of the Judaeo-Christian tradition through an examination of selected writings of the Old Testament in their historical setting. Emphasis is placed on the student's direct familiarity with the text of the Bible.


A study of the faith of the New Testament community as reflected in its literature (including the Gospels, Acts and Letters of Paul). Attention is given to the development of tradition and problems of interpretation.

REL. 210. Religions of the World, 3 credits.

An investigation of the world's major religions which will give attention to their origin, history, mythology, and doctrines.

REL. 290. Topics in Religion, 1-3 credits.

A study of selected topics in religion at the lower division level. No prerequisite. May be repeated for credit.

REL. 320. Life and Teachings of Jesus, 3 credits.

A study of the life and teachings of Jesus of Nazareth with a view to understanding their significance for the first century and for the twentieth century.
REL. 340. Religion in America, 3 credits.
A descriptive approach to the study of religion, its role in contemporary American society and its function for contemporary man. Special attention is given to major forms of religion in America.

REL. 350. Advanced Biblical Studies, 3 credits.
An intensive study of selected Biblical books or themes, with emphasis upon both the original significance of the material and its contemporary relevance. Prerequisite: Rel. 201 or Rel. 202.

REL. 360. History of the Christian Church, 3 credits.
A survey of the development of the Church with primary emphasis upon the people, ideas, doctrines, and major crisis points around which the development took place.

Detailed investigation of one or more of the world’s non-Christian religions, such as Judaism, Hinduism, Buddhism, Taoism, Islam, or others as announced. Prerequisite: Rel. 210 or permission of instructor.

REL. 440. Major Religious Thinkers, 3 credits.
Examination of the works of one or more important people in western religious thought, such as Karl Barth, Rudolph Bultmann, H. Richard Niebuhr, Karl Rahner, A. Joshua Heschel or others.

REL. 460. Issues in Religious Thought, 3 credits.
Reading and discussion of issues that have had significant import or are matters of present religious concern. Particular topics will vary but may include such items as changing patterns of religious thought, the possibility of faith in a secular age, and morality and religion.

REL. 490. Special Studies in Religion, 3 credits.
Designed to give able students an opportunity to do independent study in religion under faculty supervision. Prerequisite: permission of department.

REL. 499. Honors, 6 credits. Year Course.

Philosophy and Religion 181
DEPARTMENT OF PHYSICS

Dr. Robert E. Kribel, Head of the Department

Professor Wells; Associate Professors Kribel, K. Moore, Staib, and Taylor; Assistant Professors Conway, J. Gordon, Ingham, and Leung.

The Department of Physics offers a program of study leading to careers in pure and applied physics, engineering science, medicine, education, and government. By combining a major in physics with study in another area, an even broader range of career objectives can be accommodated (e.g., Chemical Physics, Biophysics, Geophysics, Environmental Physics, Mathematic Physics, Medical Physics, Radiation Safety, etc.). The Department of Physics also provides General Studies courses for all students and courses to serve needs of other departments.

The minimum requirement for an undergraduate major in physics (B.S. or B.A.) is 32 semester hours of courses numbered 230 and above. These courses must include Phys. 231-232 (General Physics), Phys. 337 (Atomic Physics), Phys. 341 (Mechanics), Phys. 445 (Electricity and Magnetism) and Phys. 347-348 (Physics Laboratory).

The minimum requirement for a minor in physics is 18 hours including Phys. 231-232 (General Physics). The remainder of the 18 semester hours may be selected from courses numbered 230 and above.

In order to meet course prerequisites, students anticipating a major or minor in physics should elect Math. 235-236 (Analytic Geometry and Calculus).

Students interested in a physics major or minor should consult the Head of the Department, 112 Miller Hall.

Suggested Programs

MAJOR IN PHYSICS
(B.A./B.S. Degree)

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<th>Freshman Year</th>
<th>Credit Hours</th>
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<td>Chem. 101-102</td>
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182 Physics
### PROGRAM FOR A MAJOR IN PHYSICS QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

1. Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
2. Educ. 360—*Foundations of Curriculum* (junior year).
3. SeEd. 3711—*Clinical Techniques, Natural Science Methods* (normally in the first semester of the senior year).
4. Educ. 470—*History and Philosophy of Educational Thought* (senior year)
   or
   Educ. 471—*Values and Teaching* (senior year).
5. Educ. 480—*Student Teaching* (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—*The School Health Program* (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

### Description of Courses

**Physics**

**PHYS. 109  Introductory Physics** (3, 2), 4 credits.

Basic concepts and techniques of physics. A discussion of applications relevant to contemporary life. This course is recommended as a partial fulfillment of the General Studies requirement for non-science majors.

**PHYS. 130.  General Physics I (Non-Calculus)** (3, 2), 4 credits.

An introductory course exploring fundamental concepts and principles of physics.

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<td>Electives</td>
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NOTE: The B.A. degree also requires 6-14 hours in Foreign Language and 3 hours in Philosophy.
PHYS. 135. General Physics II (Non-Calculus) (3, 2), 4 credits.
An introduction to basic theories of physics and their applications. Prerequisite: Phys. 130.

The scientific, technological, and economic aspects of energy are studied. Potential sources and uses are examined.

PHYS. 220. Astronomy (3, 2), 4 credits.
A descriptive astronomy course. In addition to laboratory activities, students will have the opportunity to use a planetarium, take a field trip to a modern observatory and join local evening observation groups. A General Studies option in natural science for all students.

PHYS. 225. Electronics for Nonscientists, 3 credits.
An elementary electronics' course covering transistors, vacuum tubes, amplifiers, magnetic recording, radio/TV transmitting and receiving, entertainment systems and integrated circuits. (Science majors should elect Phys. 241.) Prerequisite: Phys. 109 or consent of instructor.

PHYS. 230. Health Physics (3, 2), 4 credits.
A course in the study of radiation hazards, dose limitations, dose calculations, shielding requirements, radiation measurements, contamination problems, decontamination procedures and survey instruments. Prerequisites: Mathematics General Studies course and one semester of physics, biology, or chemistry.

PHYS. 231-232. General Physics (Calculus) (3, 3), 4 credits each semester.

PHYS. 241. Electronics (2, 4), 4 credits.
DC and AC circuits, diodes, vacuum tubes, transistors, amplifiers, oscillators, integrated circuits, pulse and digital circuits. Prerequisite: Phys. 135 or 232.

PHYS. 252. Electronic Instrumentation (2, 4), 4 credits.
Transducers, data systems, switching concepts, logic gates, counters, registers, readouts, A/D and D/A conversion, noise, phase-sensitive detection, telemetry and applications to specific scientific equipment. Prerequisite: Phys. 241.

PHYS. 337. Atomic Physics, 3 credits.
A study of special relativity, the development and applications of atomic physics and introductory quantum mechanics. Prerequisites: Phys. 231-232.

PHYS. 338. Nuclear Physics, 3 credits.
An introductory course in nuclear physics including radiation processes, nuclear models and elementary particles. Prerequisite: Phys. 337.

PHYS. 341-342. Mechanics, 3 credits each semester.
Application of the fundamental laws of mechanics to particles and rigid bodies. Topics include statics, dynamics, central forces, oscillatory motion, and generalized coordinates. Prerequisites: Phys. 231-232.
PHYS. 344. Dosimetry and Instrumentation (3, 2), 4 credits.
A detailed study of radiation detection, statistics, counting techniques, radiation, dosimetry, survey and laboratory instruments. Prerequisite: Phys. 230.

PHYS. 347. Physics Laboratory I (0, 4), 2 credits.
An advanced laboratory in which students will perform experiments from several areas of physics. Prerequisite: Consent of instructor.

PHYS. 348. Physics Laboratory II (0, 4), 2 credits.
An advanced laboratory in which students will participate in open-ended projects in experimental physics. Prerequisite: Phys. 347.

PHYS. 350. Optics, 3 credits.
A study of the kinematic properties and physical nature of light, including reflection, refraction, interference, diffraction, polarization, coherence and holography. Prerequisites: Phys. 231-232.

PHYS. 391-392. Seminar, 1 credit per year.
Participation in the department seminar program. Open to juniors and seniors with consent of the instructor.

PHYS. 430. Statistical and Thermal Physics, 3 credits.
A discussion of the basic physical concepts and methods appropriate for systems of very many particles: elementary statistical concepts, equilibrium, entropy, ensembles, quantum statistics, kinetic theory, transport theory and non-equilibrium thermodynamics. Corequisite: Phys. 337.

PHYS. 445. Electricity and Magnetism, 3 credits.
A study of the electrostatic field, the magnetic field, direct and alternating currents, and electromagnetic waves. Prerequisites: Phys. 231-232.

PHYS. 470-471. Selected Topics in Theoretical and Experimental Physics, 1-3 credits each semester.
A study in depth of specific areas of physics selected according to student needs and interests and staff availability. Prerequisites: Phys. 231-232 plus 16 additional hours of physics.

PHYS. 491-492. Seminar, 1 credit per year.
Participation in the department seminar program. Open to juniors and seniors with consent of the instructor. Prerequisite: Phys. 392.

PHYS. 497-498. Problems in Physics, 1-3 credits each semester.
A conference course in which the subject matter and experimental work are selected to meet the needs and interests of each individual student. (Open with permission of the Head of the Department.)

PHYS. 499. Honors, 6 credits. Year Course.

PHYS. 501. Workshop in Physics, 3 credits.
Concentrated study in particular areas of physics.
PHYS. 505. Matter and Energy, 3 credits.

The course is intended to give graduate students planning to teach in the elementary school an understanding of one of the major physical science problems facing mankind. Emphasis is placed on matter and energy as unifying concepts in the physical sciences.

PHYS. 520. Classical Mechanics, 3 credits.

Classical mechanics through Lagrangian and Hamiltonian formulation of Newton’s laws; particle and rigid body motion; variational principle. Topics also include small oscillations, canonical transformations, and relativistic mechanics.

PHYS. 530. Experimental Nuclear Physics, 3 credits.

An integrated lecture-laboratory study of natural and artificial radioactivity. Topics include rates of radioactive processes, interactions of radiations with matter, and gamma spectroscopy. Characteristics of a variety of thermal neutron reactions will be illustrated using a 4 Ci Pu—Be isotope neutron source.

PHYS. 540. Solid State Physics, 3 credits.

Forces between atoms: crystal structure; lattice vibrations and thermal properties of solids; free electron theory of metals; band theory of solids; semi-conductors dielectrics.

PHYS. 550. Electrodynamics, 3 credits.

A study of electrostatics, magnetostatics and electrodynamics with special emphasis on the application of Maxwell’s equations; for example, propagation, reflection, refraction, diffraction, dispersion and radiation of electromagnetic waves.

PHYS. 560. Quantum Mechanics, 3 credits.

A basic course in quantum mechanics including a short review of selected topics from atomic physics. Topics to be covered include uncertainty principle, Schroedinger equation, operators, eigenfunctions, potential wells, harmonic oscillator, hydrogen atom, and transition probabilities.

PHYS. 570. Plasma Physics, 3 credits.

An introduction to the plasma state investigating motions of charged particles in fields, collisions, adiabatic invariants, fluid and kinetic descriptions of a plasma, diffusion, plasma oscillations and waves, confinement, instabilities and applications.

PHYS. 580. Astrophysics, 3 credits.

An introduction to the problems of modern astronomy and to the quantitative application of physical principles to these problems. Topics of study include stellar structure and evolution, the interstellar medium and star formation, cosmic rays, pulsars, galactic structure, extragalactic astronomy, and cosmology.
DEPARTMENT OF POLITICAL SCIENCE AND GEOGRAPHY

Dr. William R. Nelson, Head of the Department

Professors Cline, H. Myers, and Nelson; Associate Professors Enedy and Mortimer; Assistant Professors Clark, Mechtensimer, Richason, and Wall; Adjunct Associate Professor J. Paul; Adjunct Assistant Professor R. Sullivan.

The Department of Political Science and Geography offers programs designed for students interested in political processes, institutions, and theory and in regional and systematic geography. These programs offer a broad background for careers in government and teaching and provide the basis for graduate study.

This department offers a major in Political Science, a major in Geography, and minors in these two subjects. In addition, the department offers concentrations in Para-Legal Studies, and Public Administration. Furthermore, the department administers a program in Pre-Law, a General Social Science major, and minors in Criminal Justice, described on pgs. 73, 68-70, 66, and Urban Regional Studies, described on pg. 76.

The major and minor programs in Political Science and Geography meet the Collegiate Professional Certification requirements for teaching these subjects in Virginia’s secondary schools.

MAJOR IN POLITICAL SCIENCE

The minimum requirement for a major in Political Science is 30 semester hours in Political Science courses including: PoSc. 225 (United States Government), PoSc. 230 (International Relations), PoSc. 305 (Political Research Methods) and one Political Theory course chosen from PoSc. 300, 310, 315, 320 or 330. Students have considerable flexibility in selecting a program to meet their particular interests, in consultation with their advisor. All students must complete the General Studies program described on pages 39-41.

MAJOR IN POLITICAL SCIENCE
(B.A. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
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<tr>
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<td>3</td>
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<tr>
<td>Foreign Language</td>
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Political Science and Geography
### Major in Political Science (B.S. Degree)

#### Freshman Year

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#### Sophomore Year

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<td>Natural Science</td>
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<td>Political Science Electives</td>
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#### Junior Year

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#### Senior Year

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### Major in Geography

The minimum requirement for a major in Geography is 30 semester hours. The following courses are required for the major: Geog. 120 (Introduction to Geography), Geog. 210 (Physical Geography), Geog. 215 (Map Reading and Interpretation), Geog. 236 (Anglo-America), and Geog. 315 (Field Studies in Geography). The remainder of the thirty hours will consist of electives in Geography.
## MAJOR IN GEOGRAPHY (B.A. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
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* See Foreign Language Requirements for B.A. degree.

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## MAJOR IN GEOGRAPHY (B.S. Degree)

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<th>Freshman Year</th>
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</table>

* See Foreign Language Requirements for B.A. degree.
PROGRAM FOR A MAJOR IN POLITICAL SCIENCE OR GEOGRAPHY QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

(1) Psyc. 233 and 234—Human Growth and Development (sophomore year).
(2) Educ. 360—Foundations of Curriculum (junior year).
(3) SeEd. 371H—Clinical Techniques, Social Science Methods (normally in the second semester of the junior year or first semester of the senior year).
(4) Educ. 470—History and Philosophy of Educational Thought (senior year)

or

Educ. 471—Values and Teaching (senior year).
(5) Educ. 480—Student Teaching (senior year).
(6) A course in U.S. History (anytime in the program).
(7) Hth. 370—The School Health Program (anytime in the program).
(8) The program must include a course in basic economics.

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

MINORS

A student may minor in Geography or Political Science. Eighteen semester hours are required for a minor.

CONCENTRATION IN PARA-LEGAL STUDIES

This interdisciplinary program is designed for students who plan to work in law related activities. Students who are majoring in political science, pre-law, management, office management, legal secretarial studies, or other related fields may want to acquire skills, knowledge, and experience which will equip them to work in a law office, insurance company, bank, or corporation in a professional capacity, requiring some legal training. Students preparing for law school may also want to complete the law related courses in this program, if not the entire legal assistant curriculum. All students choosing this concentration will complete the following requirements as well as the General Studies and degree requirements.

Required courses (18 hours): Actg. 495-496 (Business Law), PoSc. 210 (Introduction to Law and Jurisprudence), PoSc. 390 (Judicial Process), PoSc. 405 (Administrative Law), PoSc. 495 (Internship in Politi-
Electives in the core curriculum (at least 6 hours to be selected by the student in consultation with an advisor from among the following): Actg. 241-242 (Elementary Accounting), Fin. 310 (Real Estate), Actg. 218 (Legal Environment of Business), Actg. 377-378 (Federal Income Tax Accounting), Mgt. 489 (Personnel Administration), BEOA. 320 (Office Management), Econ. 445 (Industrial Organization), PoSc. 325 (Constitutional Law), PoSc. 326 (Civil Rights), PoSc. 303 (Environmental Law).

NOTE: The program suggested above may be subject to modification should the State of Virginia and/or the State Bar implement certification requirements for legal assistant and para-legal training programs. It is suggested that students consult one of the program advisors, Dr. Henry Myers, or Mr. John Paul, Political Science and Geography Department.

CONCENTRATION IN PUBLIC ADMINISTRATION

This interdisciplinary program is designed for students who are preparing for public service careers in government at various levels, either directly upon graduation or after further graduate training in the field. There is an increasing demand for such specialists since state and local government posts are among the fastest growing positions in the 1970's.

Students who major in Political Science while obtaining a concentration in Public Administration will complete the following requirements, in addition to the General Studies and degree requirements: A minimum of 24 credit hours in the interdisciplinary core curriculum and a minimum of 30 credit hours in political science courses. For those students pursuing a major in management or economics who desire to complete a concentration in public administration, it is recommended that they take a minimum of 24 credit hours (12 required hours and 12 elective hours) in the core curriculum courses, in addition to completing PoSc. 265, 366, 405, 420, 495; which are also recommended. Management and economic majors who have taken elective or required courses listed in the core curriculum as part of their major should select appropriate courses from among these five public administration courses in consultation with their advisors.

Core Curriculum (a minimum of 24 hours as follows): Actg. 241-242 (Elementary Accounting), Mgt. 201 (Computer Applications), Econ. 326 (Public Finance).

Electives in the Core Curriculum (at least 12 hours to be selected by the student in consultation with an advisor from among the follow-
Political Science Specialty (a minimum of 30 hours to be taken from below as follows):

Required courses: PoSc. 225 (U.S. Government), PoSc. 230 (International Relations), PoSc. 265 (Public Administration), PoSc. 300 (Political Analysis) or one of the theory courses offered by the Political Science Department (310, 315, 320, 330), PoSc. 305 (Political Research Methods), PoSc. 306 (Applied Political Research), PoSc. 366 (Public Personnel Administration), PoSc. 405 (Administrative Law), PoSc. 420 (Public Management), PoSc. 425 (Regional Planning and Organization), PoSc. 496 (Internship in Public Administration).

For further information and advisement regarding the public administration concentration, it is suggested that students contact Mr. Vernon Mechternsimer, Burruss 1, Political Science and Geography Department Office.

ADDITIONAL INFORMATION

Brochures are available describing the programs in Political Science, Geography, Criminal Justice, Para-Legal Studies, Pre-Law, Public Administration, General Social Science, and Urban-Regional Studies.

Description of Courses

Geography

GEOG. 120. *Introduction to Geography*, 3 credits.

A study of the geography of the major cultural regions of the world, giving attention to important individual countries within each cultural region. Pertinent background material on systematic physical and cultural geography is presented at appropriate places in the course.


The physical aspects of man's environment: World distributions of land forms, weather and climate, natural vegetation, soils, and minerals; and the interrelationships between these factors. Also considered are earth-sun relationships and map projections.

*Political Science and Geography* 193
GEOG. 215. **Map Reading and Interpretation**, 3 credits.

An introduction to a wide variety of maps used by the educator, layman, and public official with critical analysis of various cartographic techniques used to represent and present information.

GEOG. 236. **Geography of Anglo-America**, 3 credits.

A geographic study of the regional similarities and differences in United States and Canada. Special attention is given to changes taking place in urban and rural areas.

GEOG. 280. **Introduction to Cultural Geography**, 3 credits.

This course as an introduction to cultural geography, has as its broad theme an understanding of man as an occupant of the earth. Concepts of cultural perception and diffusion will be presented, and utilized in an analysis of processes of cultural differentiation, including language, religion, and livelihood types.

GEOG. 301. **Cartography (2,3)**, 4 credits.

Methods of projection development, map drafting, and reproduction are presented. Modern methods of topographic and thematic map preparation are presented by lectures, demonstration sessions, and laboratory work.

GEOG. 302. **Advanced Cartography (2,3)**, 4 credits.

Advanced methods in map construction for reproduction. Techniques in statistical graphic representation are presented, as well as map construction from aerial photographs and satellite imagery. Modern techniques in scribing are also presented. **Prerequisite: Geog. 301.**

GEOG. 315. **Field Studies in Geography**, 3 credits.

To expose the student, by field work in Geography, to the operational techniques of observation, interviewing, and collection of data necessary for problem solving in Geography.

GEOG. 335. **Geography of Africa**, 3 credits.

The physical environment, natural resources and human geographical patterns of Africa.

GEOG. 337. **Geography of Latin America**, 3 credits.

Analysis of physical and cultural environment, resource base, and economic development of Latin America. Attention focused on assets and liabilities and geographic foundations of political stability.

GEOG. 345. **Economic Geography**, 3 credits.

A systematic economic-geographic survey of primary, secondary, and tertiary production. Emphasis will be placed on mining, manufacturing, trade and agriculture.

GEOG. 346. **Geography of Europe**, 3 credits.

Geographic assessment of regional and national characteristics of the European nations.


Deals with the natural environment of the Soviet Union and the regional distribution of its basic resources and economic activities.

194 **Political Science and Geography**
GEOG. 349. Geography of East Asia, 3 credits.

An analysis of the physical and cultural environments of China, Japan, Korea, Mongolia, and the countries of Southeast Asia, and an evaluation of the resources available for economic development.

GEOG. 350. Geography of Australia and the Pacific Islands, 3 credits.

Analysis of the physical and cultural geography of the region. Attention is focused on the environmental assets and liabilities of future development in Australia, New Zealand, Polynesia, Melanesia and Micronesia.

GEOG. 378. Geography of the Northern Lands, 3 credits.

A regional study of the lands north of the Arctic Circle, including Canada, Alaska, Greenland, Scandinavia, and Siberia. Both the physical environment and the cultural and social characteristics will be considered and examined. Some attention will be given to the Antarctic on a comparative basis.

GEOG. 410. Urban Geography, 3 credits.

Study of the city in its geographic setting giving perspective of modern urban problems' origin and growth of cities and influence of location on city functions. Looks at the internal structure of the cities and the influence of the internal structure on its population groups.

GEOG. 415. Climatology, 3 credits.

The systematic study of the atmosphere with emphasis upon such phenomena as temperature, pressure, humidity, air masses and fronts; the occurrence of these phenomena on a global basis; and a detailed survey of the world-wide distribution of climate types.

GEOG. 425. Regional Planning and Organization, 3 credits.

For course description, see PoSc. 425.

GEOG. 475. Introduction to Political Geography, 3 credits.

The study of the state as a feature of the earth's surface, its territory, population, organization, resources. Geographical aspects of conflicts between states. Law of the sea, foreign trade, political geography of rivers. Territorial behavior.

GEOG. 490. Special Studies in Geography, 1-3 credits each semester.

Designed to give capable students in Geography an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

GEOG. 495. Internship in Geography, 3-6 credits.

Practical experience in and observation of a public agency utilizing geographic methodology. Work experience will be supervised by an official of the agency and a faculty member. Periodic seminars and written reports are required. Prerequisite: Geography major of junior or senior standing with permission of Department Coordinator.

GEOG. 499. Honors, 6 credits. Year Course.

GEOG. 550. Geography of Contemporary Problem Areas, 3 credits.

Study of the physical, economic, historical and cultural background of selected regions and nations from a contemporary perspective. Presents an analysis for understanding present day conditions, and the social significance of the events occurring in these areas. In addition to the extensive use of maps in the course, pertinent outside readings will be required.
GEOG. 580. Cultural Geography, 3 credits.
A study of aspects of culture in its geographic setting: language, religion, political organization, patterns of livelihood, settlements, population growth and movement. The interaction of man and his geographic environment will be stressed.

GEOG. 590. The Tropical World, 3 credits.
Study of the areas of the world bordering on the Equator, including Central Africa, Southeastern Asia, Central and Northern Latin America and the Pacific. Students will study the physical environment in relationship with the cultural and social characteristics that together make these areas part of the present world political struggle.

Political Science

POSC. 110. Introduction to Political Science, 3 credits.
Introduction to concepts, organization, and terminology of government. Basic introductory material for the study of political science, including national, state, and local government, international relations, comparative government, constitutional law, and political theory.

POSC. 210. Introduction to Law and Jurisprudence, 3 credits.
A study of the sources, functions, and processes of the American legal system.

POSC. 215. Introduction to Criminal Justice, 3 credits.
An introduction to the development of the American Criminal Justice system in its three dimensions: police, courts, and corrections, from ancient and early English beginnings to the present.

POSC. 225. United States Government, 3 credits.
A basic course in the American political system, having for its fundamental purpose the development of responsible citizenship. Detailed coverage will be made of the origin, structure, functions, and current trends of national government. Some comparison is made of the structure and ideologies of American and foreign governments.

POSC. 226. State and Local Government, 3 credits.
A study of state and local government in the United States, with particular focus on Virginia. Emphasis is placed on an understanding of the framework, functions, and problems of state and local (rural and urban) governments, and the responsibilities of the individual citizen.

POSC. 230. International Relations, 3 credits.
A survey of the field of international relations, including consideration of the elements of national power, foreign policy, diplomacy, propaganda, foreign aid, war, international law, and international organization.

POSC. 240. Soviet Political System, 3 credits.
A study of the Soviet Union emphasizing the Communist Party, the governmental structure, and the nature of politics. Also included are aspects of historical background, Communist theory, Soviet foreign policy and other related areas.

POSC. 265. Public Administration, 3 credits.
An introductory survey to the principles, functions, and processes of public administration with specific emphasis on the political aspects and environment of bureaucracies, and the how and why of policy-making within an administrative system. Organizational
structure, personnel, budgeting, public relations and government values, traditions, and objectives are analyzed. (Not open to students who have previously completed PoSc. 365 (Public Administration).

POSC. 300. Political Analysis, 3 credits.

A brief introduction to the scientific method as applied to the social sciences, and principal behavioral approaches currently used in political research, such as systems analysis, functional analysis, and decision-making analysis. (Junior standing or permission of instructor and 3 courses in Political Science required.)

POSC. 301. Criminal Justice, 3 credits.

A study of the Criminal Justice system within the United States. The course concentrates upon the various components of the state and federal systems: police, prosecutorial and defense functions, the judicial system, and corrections.

POSC. 302. Criminal Procedure, 3 credits.

A study of the procedural aspects of criminal prosecution, including initiation of complaint, issuance of process, preliminary examinations, grand jury functions, incidents of trial, post-verdict action, appellate review, and collateral review.


A background history of environmental protection efforts, followed by a study of modern legal resources and the political and economic problems resulting from environmental regulation; the ultimate effect on the home and the individual.

POSC. 305. Political Research Methods, 3 credits.

Introduction to quantitative research methods and statistical techniques useful for the political and social scientist such as the experimental method, significance tests, content analysis, correlation, scaling, and regression analysis. (Junior standing or permission of instructor and 3 courses in Political Science required.)

POSC. 306. Applied Political Research, 2-3 credits.

Application of research methods introduced in PoSc. 300 and/or 305 to political problem solving. Research project to demonstrate student's capacity to define a research problem, state hypotheses, construct a model and choose appropriate methods to test hypotheses, such as questionnaire design and sampling methods, and write up of results. The seminar method will be used. Prerequisite: PoSc. 305.


A study of selected problems in the field of Political Science. Criteria for the selection of the problems will be currency and importance. Course may be repeated once.

POSC. 310. Political Theory, 3 credits.

Emphasis upon selected political thinkers from Machiavelli to Marx with some attention given to prior theorists such as Plato and Aristotle. Among the concepts to be considered are the state, natural law, and sovereignty.

POSC. 315. Contemporary Political Thought, 3 credits.

Ideologies and their impact since 1848. Course will deal with such phenomena as nationalism, Social Darwinism, collectivist theory and practice, development of democratic ideas, and the totalitarianisms of the 20th century. Focus will be an attempt to explain political and social behavior.

Political Science and Geography 197
POSC. 320. Marxist-Leninist Theory, 3 credits.
A study of Communist theory as set forth by Marx, Engels, and Lenin with an analysis of how this theory has been interpreted, with emphasis on the Soviet Union and Communist China. The international implications of Marxist theory and the Communist-Socialist relationship in theory will also be dealt with.

POSC. 325. Constitutional Law, 3 credits.
A study of the legal aspects of the American democratic system. The development of the Constitution will be explored and case studies used to portray important events and changes.

POSC. 326. Civil Rights, 3 credits.
An examination of the judicial interpretation of civil rights in America with emphasis upon freedom of speech, due process of law, racial discrimination and procedural protections in criminal cases.

POSC. 327. Criminal Law, 3 credits.
Study of substantive criminal law, including common law sources and elements of various criminal offenses, justifications, and defenses.

POSC. 330. American Political Thought, 3 credits.
A study of the development and significance of political ideas that have influenced American society and government.

POSC. 332. Chinese Government and Politics, 3 credits.
A study of the internal political process and institutions of mainland China. It includes the ideology of Chinese Communism; major political developments since 1949; current trends and problems; the role and functioning of the Party, the Government, the Army, and other leading bodies in the political process.

POSC. 334. Chinese Foreign Policy, 3 credits.
Development, motivation, and characteristics of Peking's foreign relations; study in depth of the Sino-Soviet conflict, China's relations with the United States, its participation in the United Nations, Chinese military and arms control policies, relations with Taiwan, policies and strategies in Asia and the Third World.

POSC. 338. Soviet Foreign Policy, 3 credits.
An analysis of the historical, ideological, internal and strategic factors which influence the formulation of Soviet foreign policy. Special emphasis is placed on Soviet objectives in the West and in Asia, as well as her role in the U.N.

POSC. 345. Comparative Political Systems, 3 credits.
Comparative analysis of European constitutions, political systems, and governmental processes with major emphasis on the United Kingdom, France, and West Germany, and certain non-western systems.

POSC. 350. Governments of Latin America, 3 credits.
A comparative study of constitutions, governmental institutions, political parties and dynamics, and political issues and trends in most of the states of Central and South America.

POSC. 360. Urban Politics, 3 credits.
A study of the functions and role of local government in urban America with emphasis on the social, economic, and governmental problems of cities and metropolitan areas.
POSC. 362. Political Socialization and Behavior, 3 credits.
An analysis of how pre-adults are inducted into their roles in the political system, the consequences of this process for different political systems including the United States, the growth of divergent political behavior patterns, and the research methods used to determine how the young citizen acquires political attitudes, knowledge, and orientations.

POSC. 366. (also MGT. 366) Public Personnel Administration, 3 credits.
A survey of basic principles and functions of personnel administration in the public service, including a discussion of the roles of personnel management, recruitment, placement, wage and salary administration, training, retirement, and other personnel functions.

POSC. 369. Political Parties and Elections, 3 credits.
A study of national political parties and elections. Attention is given to the origin and evolution of the major and important minor parties, the nomination and election process, the presidential campaign, the role and practical working of political parties, the influence of public opinion and pressure groups, and the responsibilities of the individual voter.

POSC. 370. United States Foreign Policy, 3 credits.
An investigation of the processes for making foreign policy, the underlying premises influencing specific policies, and the substance of American foreign policy.

POSC. 380. The National Executive, 3 credits.
A study of the present state of the law and the practice of the institution of the American Presidency focusing on the sources, bases and character of the power required by the President for effective executive action. Relationships of the Presidency to foreign affairs, the Congress, the public, the party structure, and the administrative establishment will also be considered. Prerequisite: PoSc. 225 or permission of instructor.

POSC. 385. The Legislative Process, 3 credits.
Study of the legislative process will concentrate on the operation of Congress with regard to such matters as its rules and procedure; its relationships to the Presidency, to the bureaucracy, to pressure groups, and to the courts; and a discussion of its current problems. Prerequisite: PoSc. 225 or permission of instructor.

POSC. 390. The Judicial Process, 3 credits.
A study of the judicial process will include an examination of judicial decision-making, the organization and jurisdiction of courts, a review of civil and criminal procedures, judicial review, selection and discipline of judges, and the courts' relationship to the executive and legislative branches.

POSC. 395. International Law and Organization, 3 credits.
An introduction to the principles of international law with emphasis on contemporary developments and the limitation of violence in international conflict. A study in depth of the United Nations, its performance and capacities, with lesser attention to other features of international organization.

POSC. 405. (also ACTG. 405) Administrative Law, 3 credits.
Study of the role and nature of administrative law, including procedural requirements and judicial review of administrative actions, and liability of the government and its officials.
POSC. 410. Administration in Criminal Justice, 3 credits.
A study of the major concepts of management in criminal justice and public safety agencies emphasizing functional and structural approaches and the concepts of leadership, decision-making, and the effects of the social environment in the administration of the criminal justice system.

POSC. 420. (also MGT. 420) Public Management, 3 credits.
Study of the management of public agencies from the executive viewpoint. Management's control and directives for operation of public agencies will be explored, including establishment of goals, policies, organizational structure, and output of services. Case studies will be examined to illustrate administrative behavior and managerial operations in local, regional, state and federal agencies.

POSC. 425. Regional Planning and Organization, 3 credits.
Study of trends and issues in public planning process with focus on regional planning and organization; the relationship of planners and planning boards to their communities.

POSC. 430. Communism in World Affairs, 3 credits.
A sequence of studies focusing on Communist countries other than the Soviet Union and China, e.g. Eastern European states, Cuba, North Korea; relationships among members of the Communist bloc; Communist policies, strategies, and problems in non-Communist areas. Guest speakers, seminar reports, etc. will contribute to a variety of approaches.

POSC. 490. Special Studies in Political Science, 1-3 credits each semester.
Designed to give capable students in Political Science an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

*POSC. 495. Internship in Political Science, 3 or 6 credits.
Provides students with practical experience (approximately 135 or 270 total contact hours) in an appropriate political experience. Periodic seminars and student reports required. Prerequisites: Junior or senior standing, plus fifteen hours of Political Science and permission of instructor.

*POSC. 496. Internship in Public Administration, 3 or 6 credits.
Provides students with practical experience (approximately 135 or 270 total contact hours) in a public agency. Periodic seminars and student reports required. Prerequisites: Junior or Senior standing, plus fifteen hours of Political Science and permission of instructor.

*POSC. 497. Internship in Law, 3 or 6 credits.
Provides students with practical experience (approximately 135 or 270 total contact hours) in a law-related agency. Periodic seminars and student reports required. Prerequisites: Junior or Senior standing, plus fifteen hours of Political Science, and permission of instructor.

POSC. 499. Honors, 6 credits. Year Course.

POSC. 501. Workshop in Political Science, 3 credits.
Designed primarily for social studies teachers who shall help to select political topics of current interest and demand for intensive study in a concentrated period of time, usually during the summer months.

* NOTE: No more than 6 semester hours can be counted toward a degree in any combination of internships.

200 Political Science and Geography
POSC. 529. *Problems of International Relations*, 3 credits.

An analytical study of international problems dealing with such topics as the United Nations, regionalism, political conflict, international law, nationalism, balance of power, and arms control. Problems may be determined by the exigencies of the contemporary international scene.


An intensive survey of national government in the U.S. with primary emphasis on the current problems facing the U.S. Government. Problems to be examined will include those involving the presidency, Congress and the Federal court system.
DEPARTMENT OF SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Dr. Jack H. Williams, Head of the Department

Professors E. Smith and Williams; Associate Professors Council, Geier, and Stone; Assistant Professors Bradfield, Dutt, Howard, McBrian, G. Smith, Steele, Travers, Whitmer, and Wylie; Instructors Crescenzo, Myers, and Tomlinson.

The Department of Sociology offers programs for students interested in the study of society and social life. The programs offer a broad general background for careers in government, industry, and education and provides the basis for advanced graduate training.

The Department of Sociology, Anthropology, and Social Work offers a major program in Sociology, and administers a major program in Social Work for those who seek to enter social service as a career. In addition, the Department offers a minor in Sociology and in Anthropology. Students are advised to satisfy the General Studies requirements (See pgs. 39-41) in the first years of their college career.

SOCIOLOGY

A major in Sociology is available to those students meeting the requirements for a Bachelor of Arts degree or a Bachelor of Science degree.

The minimum requirement for a major in Sociology is 30 semester hours and must include Soci. 139 (Introduction to Sociology); Soci. 300 (Contemporary Sociological Theory); Soci. 310 (Development of Sociological Thought); and Soci. 491 (Sociological Research Methods).

A student may minor in Sociology by completing a minimum of 18 semester hours: Soci. 139 (Introduction to Sociology) and Soci. 250 (Social Problems); Soci. 300 (Sociological Theory) or Soci. 310 (Development of Sociological Thought) are required.

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

(1) Psyc. 233 and 234—Human Growth and Development (sophomore year).
(2) Educ. 360—Foundations of Curriculum (junior year).
(3) SeEd. 371H—Clinical Techniques, Social Science Methods (normally in the second semester of the junior year or first semester of the senior year).

(4) Educ. 470—History and Philosophy of Educational Thought (senior year)

or

Educ. 471—Values and Teaching (senior year).

(5) Educ. 480—Student Teaching (senior year).

(6) A course in U.S. History (anytime in the program).

(7) Hth. 370—The School Health Program (anytime in the program).

(8) The program must include a course in basic economics.

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

SOCIAL WORK

The major in Social Work leading to the Bachelor of Social Work Degree is designed to prepare graduates of this program for positions in a broad spectrum of social service agencies and for admission to graduate professional schools of social work. The minimum requirement for a major in Social Work is 48 semester hours of approved courses.

The core courses in the Social Work curriculum required of all majors are: SoSW. 287 (Introduction to Social Work); SoSW. 290 (Interventionist Methods and Skills); SoSW. 330 (Social Casework); SoSW. 335 (Policy Development in Human Services); SoSW. 350 (Social Group Work); and SoSW. 368 (Community Organization). All students are required to successfully complete Social Work Field Placement prior to graduation. Students are encouraged to enroll in Field Placement, SoSW. 485 (block plan); however, SoSW. 480-482 (concurrent plan) can be approved and arranged when individual situations merit such consideration. Students enrolled in SoSW. 485 spend eight weeks in an approved social work agency during one semester. Students enrolled in SoSW. 480-482 work part-time in an approved social work agency during the entire year.

In addition to the above required courses, Soci. 139 (Introduction to Sociology); Soci. 250 (Social Problems); Soci. 491 (Sociological Research Methods); and Psyc. 358 (Abnormal Psychology) are required. A minimum of thirteen hours of approved electives may be selected from the following disciplines and applied toward the major: Anthropology, Economics, Political Science, Psychology, Social Work, Sociology, Special Education and Health. Students should explore with their faculty advisor areas of individual interest and need in selecting courses which constitute these electives.
ANTHROPOLOGY

A student may minor in Anthropology by completing a minimum of 18 semester hours. Anth. 210 (Cultural Anthropology), Anth. 213 (Physical Anthropology), and either Anth. 227 (Introduction to Archaeology) or Anth. 284 (Introduction to Folklore) are required.

Description of Courses

Anthropology

ANTH. 110. General Anthropology, 3 credits.
Brief survey of four subdisciplines of anthropology: archaeology, linguistics, cultural, and physical anthropology. Using an evolutionary framework, basic concepts and theories of anthropology will be introduced.

ANTH. 210. Cultural Anthropology, 3 credits.
General review and introduction to the theory, concepts, and subject matter of cultural anthropology. The nature of culture, the social system, culture change, and cultural evolution will be reviewed.

ANTH. 213. Physical Anthropology, 3 credits.
Survey of research and professional subfields of physical anthropology. Introduces the basic concepts and topics of the field: biological diversity, primate and human evolution, primatology.

ANTH. 227. Introduction to Archaeology, 3 credits.
General introduction to the goals, methods and theory of historic and prehistoric archaeology. Emphasis is on North American studies.

ANTH. 282. Cultures of Appalachia, 3 credits.
An overview of Appalachian cultures, patterns of social organization, and problems.

ANTH. 284. Introduction to Folklore, 3 credits.
A survey of primary types of folklore: folk narratives (myths, legends, tales), riddles and proverbs, customs, superstitions and witchcraft, and art with an investigation of the history, problems, and issues of folklore.

ANTH. 286. American Folk Culture, 3 credits.
A survey of the material aspects of American folk culture including architecture, folk art and crafts, folk costume and speech.

ANTH. 312. North American Indians, 3 credits.
The nature of Indian societies occupying different environmental areas of North America from the time of earliest historic contact. Indian groups such as Shawnee, Mandan, Nunnamiut, Natchez, Creek, Iroquois and Sioux will be considered.

ANTH. 313. Processes of Social and Cultural Change, 3 credits.
Course views culture and society as adaptive, changing entities. It is concerned with the processes basic to the operation and maintenance of society but emphasizes the mechanisms which cause it to change: experience, learning, ecosystem change, diffusion, conflict, technological change, coercion, etc.

204 Sociology, Anthropology and Social Work
ANTH. 315. Human Evolution, 3 credits.
   An examination of the evidence for the emergence of the man and the factors which
   influenced it. The course will review fossils of early primates and will emphasize the fos-
   sil and artifactual evidence for the physical and behavior evolution of man.

ANTH. 325. Indian Societies of Mexico and Central America, 3 credits.
   Survey of the Olmec, Toltec, Toetihuanean, Maya and Aztec civilizations and the
   factors leading to their development.

   The emergence of Indian societies in North America. Emphasis allows opportunity
   for practical application of archaeological theory and concepts to the Eastern Woodlands
   and Plains of North America. Prerequisites: Anth. 110, 210, or consent of instructor.

ANTH. 338. Black Rural Folk Culture, 3 credits.
   An examination of the social and cultural heritage of the Negro in the Rural South
   including the folk beliefs, practices, religion, folk music, arts and crafts and ending with
   the transition to urban culture.

ANTH. 365. Comparative Socio-Cultural Systems, 3 credits.
   A survey of the structure and organization of societies at different levels of cultural
   development: protohominid, band, tribe, chiefdom, state. Prerequisite: Anth. 110 or 210
   or consent of instructor.

ANTH. 370. Human Variation, 3 credits.
   An examination of biological variation in modern human populations and the rela-
   tionship between human variability and environmental and cultural factors. Stresses an
   ecological approach to understanding physical variability in modern man.

ANTH. 380. Primate Behavior, 3 credits.
   An examination of the natural behavior of the primates. Focuses on the findings of
   studies of the social behavior and ecology of the primates and will look at the implica-
   tions these studies have for the evolution of human culture.

ANTH. 490. Special Studies in Anthropology, 1-3 credits each semester.
   Course offers students an opportunity to do independent study under staff super-
   vision. (Admission only by recommendation of the instructor and permission of the Head
   of the Department.)

ANTH. 544. Field Techniques in Archaeology, 3-8 credits.
   Laboratory course directed at teaching students the basic field techniques and proce-
   dures of historic and prehistoric archaeology. Classroom lectures will present techniques
   and relevant aspects of method and theory.

Sociology

SOCI. 139. Introduction to Sociology, 3 credits.
   A general survey of the field of sociology to help the student understand modern
   complex societies.

SOCI. 250. Social Problems, 3 credits.
   Designed to introduce the student to the nature of social disorganization. Various
   social problems may be explored such as crime and delinquency, stratification and poverty,
   mental illness and family.

Sociology, Anthropology and Social Work
SOCI. 252. Population and Human Ecology, 3 credits.
The rise of population since the industrial revolution and review of the basic demographic principles and the various programs of control and the human interaction with the environment. Prerequisite: Soci. 139 or permission of the instructor.

SOCI. 254. Social Stratification, 3 credits.
A study of the class, caste and power structure of the American Society. Stratification studies will be analyzed and compared. Prerequisite: Soci. 139 or permission of instructor.

SOCI. 265. Sociology of the Community, 3 credits.
A survey of community studies with special emphasis on definitions, development and modern community research.

SOCI. 300. Contemporary Sociological Theory, 3 credits.
An introduction to current schools of sociological theory, systems theory, structural-functional theory, and historical sociology. Prerequisite: Soci. 139 or permission of the instructor.

SOCI. 301. Social Gerontology, 3 credits.
An introduction to social gerontology as a field of study which emphasizes the societal aspects of aging. The course provides an overview of problems unique to the aged related to age grading as it shapes social roles, status, needs as a worker, retiree, or family member. Programmatic and policy implications will also be discussed.

SOCI. 303. The Sociology of Death and Dying, 3 credits.
The course is directed at investigating current American orientations toward death and dying and attention is given to the social organization of death and dying.

SOCI. 310. The Development of Sociological Thought, 3 credits.
A study of major sociological theorists with special emphasis upon those aspects of their work which have shaped modern sociology. Prerequisite: Soci. 139 or permission of the instructor.

SOCI. 314. Sociology of Deviance, 3 credits.
Course offers students a wide range of explanations of deviance. Topics considered are the functions, social definitions, societal reactions, and the political aspects of deviance as a characteristic of all societies. Deviant attributes as well as acts are considered.

SOCI. 320. Sociology of Religion, 3 credits.
A sociological analysis of religion: How it influences and is influenced by man’s social existence. Prerequisite: Soci. 139 or permission of the instructor.

SOCI. 333. Small Groups, 3 credits.
Examination of research and theory related to small groups as components of larger structures and as microsocieties.

SOCI. 336. Sociology of Prejudice and Discrimination, 3 credits.
A study of the causes, consequences, personal and group reactions to prejudice and discrimination using research findings and case studies in various types of majority-minority situations. Prerequisite: Soci. 139 or permission of the instructor.

206 Sociology, Anthropology and Social Work
An introduction to sociological social psychology, examining human development through interaction of social psychological processes, structure and culture. (Can be counted toward Anthropology minor.) *Prerequisite: Soci. 139 or permission of the instructor.*

A sociological analysis of work and leisure in contemporary American society with particular emphasis upon conceptual and human problems in a context of social change.

This course will examine the changes associated with the transition from traditional to modern societies in Western and non-Western societies.

An introduction to the study and analysis of Social Movements in the USA as agents of social and ideological change. Emphasis is given to movements which have goals of extending and/or protecting rights of individuals and groups in the face of increasing industrialization, urbanization, and centralization of power.

SOCI. 361. *Bureaucracy and Modern Society*, 3 credits.
Study of organizations and bureaucracies primarily in contemporary American society: their internal structures and processes and their relation to other social units in society. *Prerequisite: Soci. 139 or Soci. 250 or permission of the instructor. (Formerly Soci. 473.)*

SOCI. 364. *American Sects and Cults*, 3 credits.
Students will examine selected types of sectarian subcultures including communal societies, the Shaker, Hutterites and others. (Can be counted toward Anthropology minor.) *Prerequisite: Soci. 139 or permission of the instructor.*

SOCI. 375. *Medical Sociology*, 3 credits.
An introduction to the field of medical sociology that examines the salient issues in the field and related theoretical perspectives. These two foci are important in understanding the ability of humans to live to capacity. Attention is given to health care programs in developing countries as well as modern industrial societies.

SOCI. 425. *Criminology*, 3 credits.
A study of the theories of criminal causation; a survey of the types of traditional crime and investigation into white-collar and modern crime in contemporary society.

SOCI. 427. *Juvenile Delinquency*, 3 credits.
A study of youth gangs, deviation and youth culture standards as well as the treatment used. Recent research reports will be emphasized.

SOCI. 430. *Penology*, 3 credits.
The history, philosophy, policies and problems of the treatment of violators by the police, courts and correctional institutions.

SOCI. 440. *Educational Sociology*, 3 credits.
Analysis of the sociological foundations of education (organization, processes, values, goals, etc.) Emphasis is placed on social climate, groupings, teacher/learner social roles. *Prerequisite: Soci. 139 or permission of the instructor.*
SOCI. 470. Urban Sociology, 3 credits.

The study of the sociological development of cities and metropolitan areas. Pre-
requisite: Soci. 139 or permission of the instructor.

SOCI. 471. Industrial Sociology, 3 credits.

This course will stress the role of the individual in the work group including the de-
mands, values and standards of modern industrial plants and the response to same by employees. Prerequisite: Soci. 139 or permission of the instructor.

SOCI. 476. The Sociology of the Family, 3 credits.

The family is studied in its structural aspects. Primary emphasis is upon the hus-
band-wife, parent-child, and in-law relationships. Family behavior is related to occupa-
tional structure, religious orientation, educational patterns, and social stratification. Pre-
requisite: Soci. 139 or permission of the instructor.

SOCI. 490. Special Studies in Sociology, 1-3 credits each semester.

Designed to give capable students in Sociology an opportunity to do independent study under supervision. (Admission only by recommendation of the instructor and per-
mission of the Head of the Department.)

SOCI. 491. Sociological Research Methods, 3 credits.

A survey of the various research methods, including an introduction to the qualita-
tive and quantitative approaches to studying social phenomena. Prerequisite: Soci. 139.

SOCI. 493. Advanced Seminar in Research Methods, 3 credits.

Critical study of contemporary research findings. Concentration will be in the appli-
cation and utilization of inferential statistics and the computer in social research. Pre-
requisite: Permission of the instructor.

SOCI. 494. Senior Seminar in Sociology, 3 credits.

An examination of the complex relationships between theory and practice. Opportu-
nity is provided for students to develop and defend their own theoretical positions in relation to the potential and problems of our society. Limited to seniors majoring in sociolo-
y or social work.

SOCI./PSYC./PE. 496. Psychological and Sociological Aspects of Sport, 3 credits.

A study of the psychological and sociological implications of sport and the effect of sport on United States and other cultures.

SOCI. 499. Honors, 6 credits. Year Course.

Social Work

SOSW. 287. Introduction to Social Work, 3 credits.

An historical overview of the development of the social work profession with empha-
sis upon the various settings in which social workers practice. The focus will be upon practical experiences designed to enable the student to gain familiarity with the dynamics of the profession.

SOSW. 290. Interventionist Methods and Skills, 3 credits.

This course is designed to apply theories of communication, interviewing, and per-
sonality to the practice of generic social work. Self-awareness, analysis of worker and client value systems and knowledge of agency structure are applied practically to increase the student skills of intervention. Prerequisite: SoSW. 287 or permission of instructor.

208 Sociology, Anthropology and Social Work
SOSW. 330. Social Casework, 3 credits.

The study of a social work method that emphasizes helping individuals identify and understand their personal difficulties to the point of coping and functioning more satisfactorily in their social environment. The student will explore the various individual treatment approaches, as well as interviewing skills, cultural factors, agency functions, and relationship building. Prerequisites: SoSW. 287 and 290.

SOSW. 335. Policy Development in Human Services, 3 credits.

An examination of the social policy making process and structure in the U. S. Prerequisite: SoSW. 287 or permission of the instructor.

SOSW. 350. Social Group Work, 3 credits.

The study of a social work method that emphasizes helping individuals through small groups. The student will explore the various group treatment approaches as well as cultural factors, goal and contract setting, programming and the role of the worker in a group setting. Prerequisites: SoSW. 287 and SoSW. 290.

SOSW. 368. Community Organization, 3 credits.

This course will offer students an opportunity to study rural and urban communities as a means of understanding social organization at the community level. Prerequisites: SoSW. 287 and SoSW. 290.

SOSW. 442. Social Work in the Health Field, 3 credits.

This course is designed to provide a comprehensive understanding of the organization and delivery of health services within the field of social work. Emphasis will be placed on the use of social work interventions in these settings, as well as manpower usage, supervision and the understanding of administrative structure.

SOSW. 475. Poverty and Income Maintenance, 3 credits.

A study of the condition and impact of poverty and consideration of past, present and future welfare, income maintenance, social and health insurance programs employed to deal with the condition. Prerequisite: SoSW. 287 or permission of the instructor.

SOSW. 480. Social Work Field Placement I (Concurrent Plan), 4 credits.

Designed to give students a broad knowledge and field experience within a social work agency. Prerequisites: SoSW. 330 and either SoSW. 350 or SoSW. 368.

SOSW. 482. Social Work Field Placement II (Concurrent Plan), 4 credits.

A continuation of SoSW. 480. Prerequisites: SoSW. 330, and either SoSW. 350 or SoSW. 368.

SOSW. 485. Social Work Field Placement III (Block Plan), 8 credits.

This course offers students an opportunity to gain a broad knowledge of the basic functions, services, and roles of the agency as related to actual Social Work practice, as well as a specific knowledge of practical intervention skills necessary to carry on effective Social Work practice. The knowledge and skills related to placement will be drawn from the methods of Casework, Groupwork, Community Organization and Interventionist Methods and Skills. Prerequisites: SoSW. 330, SoSW. 350 and SoSW. 368.

SOSW. 490. Special Studies in Social Work, 1-3 credits each semester.

This course is restricted to majors in Social Work. The course provides capable students an opportunity to do independent studies under staff supervision. (Admission by recommendation of the instructor and permission of the Head of the Department.)
SOSW. 494. Senior Seminar in Social Work, 3 credits.
An examination of the complex relationships between theory and practice. Opportunity is provided for students to develop and defend their own theoretical positions in relation to the potential and problems of our society. Limited to seniors majoring in sociology and social work.
School of Business
The primary objectives of the School of Business are: (1) to prepare students for leadership roles in business and industry with a thorough understanding of the purpose, organization and management of business enterprise and of the economic and social environment within which such enterprise operates, and (2) to prepare students for secondary school teaching careers in the fields of Business Education, Distributive Education, and Home Economics.

The School of Business includes the Departments of Accounting & Finance, Business Education & Office Administration, Distributive Education, Economics, Home Economics, and Management & Marketing. Eleven baccalaureate degree programs are offered including an inter-disciplinary major in Hotel/Restaurant Management and a Master of Business Administration. Applied research and services to public and private organizations, are fostered through the Office of Economic Services, the Small Business Institute, the Management Development Center and the Center for Economic Education. Opportunities are provided for wide range of classroom, laboratory and practical experiences in order to obtain a broadly based career oriented education.

DEPARTMENTS

Accounting and Finance ....... Dr. Joseph T. Kosnik, Head
Business Education and Office Administration ....... Dr. Z. S. Dickerson, Jr., Head
Distributive Education ....... Mr. C. B. Dix, Jr., Head
Economics
Home Economics ....... Dr. Dorothy Rowe, Head
Management and Marketing ....... Dr. Ross H. Johnson, Head

INTERDISCIPLINARY PROGRAM IN HOTEL-RESTAURANT MANAGEMENT

John Bilon, Coordinator

The School of Business offers an Interdisciplinary Program involving the Departments of Accounting and Finance, Economics, Business Education and Office Administration, Distributive Education, Home Economics, and Management and Marketing.

Upon completion of this program, the graduate is qualified for management positions in the hospitality and food service industries including hotels, restaurants, travel services, clubs, recreational services, tourist attractions, food services and other institutions.
MAJOR IN HOTEL-RESTAURANT MANAGEMENT
(B.S. Degree)

Freshman Year

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<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Fine Arts</td>
<td>3</td>
<td>Actg. 241-242</td>
<td>6</td>
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<tr>
<td>Bio. 100</td>
<td>4</td>
<td>Mgt. 290</td>
<td>3</td>
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<tr>
<td>Chem. 110</td>
<td>4</td>
<td>Econ. 130-135</td>
<td>6</td>
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<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>HE. 280</td>
<td>3</td>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>History</td>
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Sophomore Year

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Sophomore Year

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Junior Year

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Senior Year

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Senior Year

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Description of Courses

Hotel-Restaurant Management

HRM. 100. Industry Seminar, 1 credit.

A series of lectures given by non-resident speakers prominent in the hospitality industry.


An orientation to the hospitality industry, its objectives, means of achieving these objectives, and opportunities for career development.

HRM. 325. Hospitality Industry Management, 3 credits.

Organization, management, personnel, and labor as they contribute to the successful operation of the hotel and food service business.

HRM. 364. Purchasing for Hospitality Industries, 3 credits.

A study of the purchasing of the variety of commodities and food supplies used in the hospitality industry. Includes source of supply, standards of quality, methods of purchase, delivery, storage, and upkeep.

The selection, purchasing, and layout of equipment for quantity food service and lodging facilities. Emphasis is on the importance of the environmental design of hotel-motel rooms, lounges, meeting rooms, dining facilities, and public areas.

HRM. 368. *Hospitality Industry Sales and Merchandising*, 3 credits.

A study of the techniques to sell consumers the service of lodging, meeting rooms, recreation, food, gift shops, and special services for the purpose of making a profit.

HRM. 400. *Seminar in Hotel and/or Restaurant Management*, 1-3 credits.

An integration of the major functional areas of hotel and/or restaurant administration into a single strategy. *Prerequisite: Permission of instructor.*

HRM. 460. *Hospitality Industry Internship*, 3-6 credits.

Supervised experience in an area of the hospitality industry. *Prerequisites: Basic courses in HRM program.*


A study of cost control of food and beverage as it applies to the hospitality industry.

HRM. 468. *Commercial Food Production*, 3-6 credits.

The planning and service of food for special functions. Laboratory offers opportunity to develop some skill in management of catering. *Prerequisite: Permission of instructor.*

HRM. 469. *Hospitality Industry Law*, 3 credits.

A study of the laws of importance in operation of hotels, motels, restaurants, and clubs.
DEPARTMENT OF ACCOUNTING AND FINANCE

Dr. Joseph T. Kosnik, Head of the Department

Professor Stanton; Associate Professors Fox, Hollis, and Kosnik; Assistant Professors Gulledge, D. Hamilton, Martin, Maxwell, Miller, Patterson, and Rosson; Instructors A. Hamilton, and Schnabel.

The Department of Accounting and Finance offers a program leading to the Bachelor of Business Administration degree with a major in Accounting.

The major in Accounting is intended to provide choices for students planning careers in the areas of public accounting, business or industrial accounting, governmental or not-for-profit accounting, general financial management, and graduate work. Courses in finance are offered to educate students in the fields of finance such as financial management, investments, insurance, and real estate.

A summary of the B.B.A. Program Requirements is shown below:

<table>
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<tr>
<th>Credit</th>
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<td>Additional General Course Requirements</td>
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<td>Core Requirements—B.B.A.</td>
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<td>Major Requirements</td>
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Bachelor of Business Administration Degree Program

General Studies Requirements 43 Hours Core Requirements 36 Hours

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Accounting and Finance 215
Six additional hours consisting of Math. 205 and Mgt. 215 are required of students obtaining a B.B.A. degree:

Major Requirements: 24 Hours

Free Electives: 19 Hours

Math. 205: 3
Mgt. 215: 3
Total: 6

MAJOR IN ACCOUNTING
(B.B.A. Degree)

Recommended Course Schedule of General Studies, Core, and Major Requirements

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<td>Eng. 101-102</td>
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<td>Actg. 375-377</td>
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MINOR IN BUSINESS ADMINISTRATION

OPTION 1:
The minimum requirement for a minor in Business Administration is 18 hours consisting of Actg. 241 (Elementary Accounting), Mktg. 380 (Marketing Fundamentals), Mgt. 300 (Principles of Management), Fin. 345 (Managerial Finance), and Actg. 218 or Actg. 495 (Legal Environment of Business or Business Law I) and Econ. 130 or Econ. 135 or Econ. 120 (Principles of Economics or Survey of Economics).

OPTION 2:
Many students complete their undergraduate degree in a field other than business and then go on to work toward a Master of Business
Administration (MBA) degree. This combination provides many good career opportunities. The non-business major who takes the following courses as an undergraduate can then go on and obtain a MBA at James Madison University in one additional year: Mgt. 506 (Quantitative Analysis I), Econ. 524 (Economic Analysis), Actg. 515 (Financial Accounting), Mgt. 531 (Management Systems), Mktg. 574 (Marketing Analysis) plus one business elective by the MBA advisor. The 500 level courses are not required in the MBA program, so they can be counted as free electives for the non-business major.

Description of Courses

Accounting

ACTG. 218. **Legal Environment of Business**, 3 credits.

The law as a means to social, political, and economic change. The American legal system from the standpoint of its sources and its philosophy, with special emphasis on business relations and the role of government in affecting them. (Formerly BuAd. 316.)


Elementary accounting principles and procedures planned to meet the needs of all business majors and others who desire a background in this area. Financial and managerial accounting concepts and the interpretation of financial statements for decision purposes are emphasized. (Formerly BuAd. 241-242.)


Topics included in the course are: Financial statements, the accounting process, cash and temporary investments, receivables, inventories, current liabilities, investment in stocks and bonds, funds and miscellaneous investments, plant and equipment, intangibles and special problems in corporation accounting. Prerequisites: Actg. 241-242. (Formerly BuAd. 343-344.)

ACTG. 375. **Cost Accounting I**, 3 credits.

An introductory course in cost accounting designed for students who plan careers in accounting or business management, and for teachers. The course includes the fundamentals of cost accounting, cost flow, cost elements, cost classification, cost accounting cycle, voucher system and factory ledger. Prerequisites: Actg. 241-242. (Formerly BuAd. 375.)

ACTG. 376. **Cost Accounting II**, 3 credits.

Devoted to accounting concepts, analysis, and techniques for proper planning and control of manufacturing operations. The managerial significance of cost behavior and volume-profit relationship is emphasized. Prerequisite: Actg. 375. (Formerly BuAd. 376.)


Devoted to a consideration of Federal income taxes. These topics among others, will be studied—income, exclusions, gain or loss on sales, exchanges, and involuntary conversions, deductions, exemptions, and pay-as-you-go withholdings. An overview is given of social security estate, and the gift taxes levied by the Federal government. Prerequisites: Actg. 241-242. (Formerly BuAd. 377.)

Accounting and Finance 217
Devoted to a consideration of income tax problems relating to partnerships, corporations, specially taxed corporations, estates, and trusts. Includes a survey of Federal estate and gift taxes, and a review of IRS Audit procedures. Prerequisite: Actg. 377. (Formerly BuAd. 378.)

ACTG. 405. Administrative Law, 3 credits.
For course description, see PoSc. 405. (Formerly BuAd. 405.)

ACTG. 410. Auditing, 3 credits.
Study of the work of the accountant in investigating, interpreting, and appraising accounting records. Prerequisites: Actg. 343-344. (Formerly BuAd. 410.)

ACTG. 411. Budgets & Controllership, 3 credits.
The establishment and use of organizational budgets for planning and control. Prerequisite: Actg. 375.

ACTG. 412. Accounting for Non-Profit Organizations, 3 credits.
A study of the accounting techniques for proper management of governmental and other non-profit entities. Prerequisite: Permission of the instructor. (Formerly BuAd. 412.)

ACTG. 413. Accounting Systems, 3 credits.
Organization and use of accounting information together with development and evaluation of accounting systems to collect, process, and report this information. Prerequisite: BEOA. 201, Actg. 343-344.

ACTG. 445. Advanced Accounting, 3 credits.
The application of fundamental theory to the preparation, interpretation and use of quantitative financial data. Emphasis is given to the measurement process, particularly in the area of multi-entity organizations. Prerequisite: Actg. 343-344 or permission of instructor. (Formerly BuAd. 445.)

ACTG. 446. Accounting Theory, 3 credits.
A study of contemporary development in accounting, including the theory underlying APB Opinions, and FASB Standards. Prerequisites: Actg. 343-344, 445.

ACTG. 450. Seminar in Advanced Accounting, 3 credits.
Designed to meet the requirements of, but not limited to, those persons majoring in accounting who are interested in being candidates for the CPA examination. The presentation of this course will be on a seminar basis covering the following fields: auditing, accounting theory, business law, and problems in various areas of interest to the group. Prerequisite: Actg. 445. (Formerly BuAd. 450.)

ACTG. 490. Special Studies in Accounting, 1-3 credits each semester.
Designed to give capable students in Accounting an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.) (Formerly BuAd. 490.)

ACTG. 494. Business Practicum, 3-6 credits.
A course to be taken by graduating seniors which would give the student an opportunity to work in and with local industry in order to gain an insight into the real side of modern business. (Formerly BuAd. 494.)

218 Accounting and Finance
ACTG. 495. *Business Law I*, 3 credits.
A study of the fundamental principles of law of contracts, sale of goods and commercial paper based on the Uniform Commercial Code. Emphasis is given to the part these play in both personal and business life. *(Formerly BuAd. 495.)*

ACTG. 496. *Business Law II*, 3 credits.
A continuation of Actg. 495, with emphasis on the law of partnerships, corporations, insurance, and government regulation of business. *Prerequisite: Actg. 495.* *(Formerly BuAd. 496.)*

Accelerated study of business law principles. *Prerequisite: Permission of instructor.* *(Formerly BuAd. 505.)*

Concerned with the overall accounting function from analysis of business transactions and their systematic recording to the interpretation of the resulting financial statements. *Not open to undergraduate business majors.* *(Formerly BuAd. 515.)*

**Finance**

FIN. 310. *Real Estate*, 3 credits.
Emphasizes industry principles and economic factors influencing the real estate business. Subjects include contracts, deeds, valuation, financing and subdivision development. *(Formerly BuAd. 310.)*

FIN. 312. *Real Estate Finance*, 3 credits.
Analyses sources and uses of capital in the real estate field; subjects covered include: Mortgages, leases, land contracts, saving and loan-banks-insurance companies as intermediaries and federal agencies in the real estate market.

FIN. 345. *Managerial Finance*, 3 credits.
Form of business organizations; corporate structure; financing through securities; sources and management of working capital; administration of income; expansion; combination; reorganization; receivership; and dissolution. *Prerequisite: Actg. 241-242.* *(Formerly BuAd. 345.)*

Designed to aid in understanding fundamentals of insurance with regard to life, fire and casualty, bonding, workmen’s compensation and rate systems. Risk management is introduced as a tool of business management. *(Formerly BuAd. 270.)*

Covers the methods of analyzing and dealing with risk—including both insurance and self-insurance methods. Commercial and industrial real estate planning with regard to risks inherent in their acquisition. *(Formerly BuAd. 425.)*

FIN. 475. *Real Estate Valuation*, 3 credits.
The practices and procedures of real estate appraisal. Analysis of economic, social and governmental forces influencing value. *(Formerly BuAd. 475.)*
FIN. 479. Principles of Investment, 3 credits.

Theories and practice of investment in a free enterprise economic system. An analysis of stocks, bonds, investment trusts, insurance, real estate, the operation of the stock market and other elements of investment. Prerequisite: Fin. 345. (Formerly BuAd. 479.)

FIN. 481. Portfolio Management, 3 credits.

The management of the holdings of securities using portfolio theory, which establishes a relationship between a portfolio’s expected return and its level of risk exposure. Prerequisite: Fin. 479.

FIN. 482. Problems in Financial Management, 3 credits.

The application of analytical techniques and financial theory to the solution of significant financial problems. The scope of the course is to provide the student with understanding of the role of the financial manager and the principal financial management problems faced by the corporation. Prerequisite: Fin. 345.

FIN. 490. Special Studies in Finance, 1-3 credits each semester.

Designed to give capable students in Finance an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.) (Formerly BuAd. 490.)

FIN. 494. Business Practicum, 3-6 credits.

A course to be taken by graduating seniors which would give the student an opportunity to work in and with local industry in order to gain an insight into the real side of modern business. (Formerly BuAd. 494.)
The Department of Business Education and Office Administration offers two options leading to a Bachelor of Science degree. Option I, Business Education, provides courses that permit certification in selected areas of Business Education leading to the Collegiate Professional Certificate. A minimum of 45 semester hours in business and 6 semester hours in business education methods is required. Option II, Office Administration, provides specialized majors in Office Administration. A choice of three majors is provided in the program: (1) Secretarial Administration (2) Office Administration and (3) Data Processing.

A minor in Business Education and Office Administration consists of 18 semester hours of required and elective courses. See the Data Processing, Secretarial Administration and Office Administration programs for a minor on the following pages.

Students who have completed courses in typewriting, accounting, or shorthand in high school or business college may be admitted to advanced courses in these subjects. In order to meet certification requirements, it may be necessary to choose other business courses as substitutes for the courses from which they have been excused.

Students interested in any program offered by the Department of Business Education and Office Administration should consult Dr. Z. S. Dickerson, Jr., HB-9, Harrison Hall Annex.

Four-Year Program (B.S. Degree) in Business Education (128 Credits)

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## CORE COURSES

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## SPECIALIZED REQUIREMENTS

**General Office Procedures**

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**Stenography**

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<td>BEOA. 131</td>
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</tr>
<tr>
<td>BEOA. 341 or 431 or 444</td>
<td>3</td>
</tr>
<tr>
<td>454 or 464</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 354</td>
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<tr>
<td>BEOA./SeEd. 380B</td>
<td>2</td>
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<tr>
<td>BEOA. 414</td>
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<tr>
<td>Accounting Elect.</td>
<td>6</td>
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<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

## Four-Year Program (B.S. Degree) in Office Administration (128 Credits)

### NON-TEACHING

**General Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Comm. 200, 222, or 226</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
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<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Natural Science</td>
<td>8</td>
</tr>
<tr>
<td>Econ.</td>
<td>6</td>
</tr>
</tbody>
</table>

**Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEOA. 100</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 131</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 201</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 270</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 320</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 330</td>
<td>3</td>
</tr>
<tr>
<td>BEOA. 354 or 414 or 324</td>
<td>3</td>
</tr>
<tr>
<td>Actg. 241-242</td>
<td>6</td>
</tr>
<tr>
<td>Mktg. 380</td>
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</tr>
<tr>
<td>Mgt. 215-216 or Psyc. 231-232</td>
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<tr>
<td>Math.</td>
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</tbody>
</table>

222  Business Education and Office Administration
### Business Education—Office Administration

#### MINORS

A minor in Business Education and Office Administration consists of 18 hours of required and elective courses.

<table>
<thead>
<tr>
<th>Data Processing</th>
<th>Secretarial Administration</th>
<th>Office Administration</th>
</tr>
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<tbody>
<tr>
<td>BEOA. 100</td>
<td>BEOA. 100</td>
<td>BEOA. 100</td>
</tr>
<tr>
<td>BEOA. 201</td>
<td>BEOA. 121</td>
<td>BEOA. 201</td>
</tr>
<tr>
<td>BEOA. 324</td>
<td>BEOA. 122</td>
<td>BEOA. 320</td>
</tr>
</tbody>
</table>
| BEOA. 414       | BEOA. 131                   | Electives chosen from the following:
|                 |                             | BEOA. 131              |
|                 |                             | BEOA. 132              |
|                 |                             | BEOA. 270              |
|                 | Electives chosen from the following: | BEOA. 131              |
|                 |                             | BEOA. 270              |
|                 |                             | BEOA. 321              |
|                 |                             | BEOA. 330              |
|                 |                             | BEOA. 400              |
|                 | BEOA. 341                   | BEOA. 131              |
|                 | BEOA. 354                   | BEOA. 270              |
|                 | BEOA. 431                   | BEOA. 321              |
|                 | BEOA. 444                   | BEOA. 330              |
|                 | BEOA. 454                   | BEOA. 400              |
|                 | BEOA. 464                   | Electives 22           |
|                 |                             | Electives 13           |
|                 |                             | Electives 22           |
Description of Courses

Business Education and Office Administration

BEOA. 100. *Introduction to Business*, 3 credits.

A general survey of the institution of business with emphasis on the history of business, the basic forms of business organization, ownership, finance, management, wages, and labor relations.

BEOA. 121. *Elementary Shorthand*, 3 credits.

An introduction to the principles of Gregg shorthand with emphasis on reading and writing shorthand outlines. Dictation and transcription are also introduced. *Prerequisite or corequisite: Typewriting.*

BEOA. 122. *Intermediate Shorthand*, 3 credits.

A continuation of the principles of Gregg Shorthand. Rapid sight reading of context material and accurate transcript of nonpreviewed dictation at 70 words per minute are required for the completion of the course. *Prerequisite: BEOA. 121 or one year of high school shorthand or the equivalent.*


The development of proper typewriting techniques and mastery of the typewriter keyboard with a minimum typewriting speed of thirty words a minute are required for this course.

BEOA. 132. *Intermediate Typewriting*, 3 credits.

A continuation of the development of techniques in typewriting correct letter forms, manuscripts, and simple statistical work. A minimum typewriting speed of fifty words a minute is required for completion of this course. *Prerequisite: BEOA. 131 or one year high school typewriting or equivalent.*

BEOA. 201. *Computer Applications*, 3 credits.

Establishes relationships between electronic computer equipment, applications, system design, and programming. A strong systems and applications emphasis includes the analysis of computer processing in various media.

BEOA. 223. *Advanced Shorthand*, 3 credits.

A complete review of Gregg Shorthand theory, plus additional emphasis on phrasing, enlargement of vocabulary, speed in writing and transcribing. A dictation speed of ninety words per minute and a transcription rate of at least twenty words per minute are required for completion of the course. *Prerequisites: BEOA. 121-122 or two years high school shorthand or equivalent.*

BEOA. 224. *Advanced Shorthand: Specialized*, 3 credits.

A continuation of the study of Gregg Shorthand theory. Opportunities are provided for students to select general office dictation or to specialize in the technical, legal, or medical secretary fields. Individualized dictation-transcription tapes and workbooks will be utilized for the specialized programs. *Prerequisite: BEOA. 223 or two years high school shorthand or equivalent.*

BEOA. 233. *Advanced Typewriting*, 3 credits.

Emphasis is placed on speed, accuracy, and production techniques in the typing of business forms, letters, manuscripts, legal documents, and statistical tables. *Prerequisite: BEOA. 132 or two years high school typewriting or equivalent.*
BEOA. 234. Office Procedures, 3 credits.
A survey of several filing systems, classroom and actual experience in using a variety of composing, duplicating, dictating and transcribing equipment. Prerequisite: One year of typewriting and sophomore status.

BEOA. 235. Introduction to Word Processing, 3 credits.
Introduction to word processing procedures and equipment. Includes experience on the MTST, MAG CARD, MEMORY typewriter, dictating and transcribing equipment, and reprographics. Prerequisite: BEOA. 131-132-234 or equivalent, sophomore status.

BEOA. 270. Business Machines (3, 2), 3 credits.
A development of vocational competency in modern business machines. A program including skills needed to operate the latest business computing machines. Practical business problems are a part of the course, and the 10-key touch system is stressed.

BEOA. 300. Statistical Calculating Machines (2, 1), 2 credits.
Development of skills in operating figuring machines by the 10-key touch system. Practical applications, solving business problems, and statistical procedures on the printing and electronic calculators are emphasized. Recommended for students where course work involves statistical calculations.

BEOA. 320. Office Management, 3 credits.
Problems concerned with planning and installing office methods and systems, effective correspondence procedures, preparation of reports, and office management.

BEOA. 321. Office Administration, 3 credits.
Advanced study in office operations, including employee relations, work measurements and standards, budget control, business information systems, and office simulation projects. Prerequisite: BEOA. 320.

BEOA. 324. COBOL Programming Language (3, Open Lab), 3 credits.
Instruction and actual experience in writing programs, debugging, and machine operation for the Common Business Oriented Language (COBOL). (Formerly BEOA. 420.)

BEOA. 330. Business Communications, 3 credits.
A development of the principles of effective business communications through the composition of business letters (application, credit, adjustment, collection, sales, promotional letters, and routine business correspondence), oral and written business reports, and dictation. Emphasis is placed on composition, arrangement, style, spelling, and positive writing. Prerequisites: Eng. 101-102.

BEOA. 335. Practicum in Word Processing, 3 credits.
Actual work experience under classroom supervision. Involves projects submitted by faculty and administrative personnel. Prerequisite: BEOA. 235.

BEOA. 341. Assembler Language Programming for Business, 3 credits.
An introductory course emphasizing basic input/output operations, comparing, addition, multi application, division, use of work areas, control macros, heading and print overflow, editing, and programmed switches. Prerequisite: BEOA. 201, or instructor approval.

BEOA. 354. Business FORTRAN Programming Language (3, Open Lab), 3 credits.
Instruction and actual experience in writing programs, debugging, and machine operation for the FORTRAN IV programming language oriented toward business applications. Prerequisite: BEOA. or Mgt. 201, or equivalent. (Formerly BEOA. 350.)
BEOA. 378. Administrative Secretarial Training, 3 credits.

Designed to give the student advanced training in secretarial office practices. Emphasis is placed on preparation of reports, letters, minutes of meetings, itineraries, and other tasks performed by the administrative secretary. Prerequisites: BEOA. 223-224 or equivalent; BEOA. 233 or equivalent; BEOA. 234.

BEOA./SEED. 380A. Clinical Techniques—Basic Business Subjects, 2 credits.

Development of classroom teaching skills appropriate to applying the principles of theoretical teaching models to teaching basic business and related subjects.

BEOA./SEED. 380B. Clinical Techniques—Accounting and Data Processing Methods, 2 credits.

Development of classroom teaching skills appropriate to applying the principles of theoretical teaching models to teaching accounting, recordkeeping, unit record processing, computer processing, and computer programming.

BEOA./SEED. 380C. Clinical Techniques—Typing and Related Subjects Methods, 2 credits.

Development of classroom teaching skills appropriate to applying the principles of theoretical teaching models to teaching psychomotor skills in typewriting and related subjects.

BEOA./SEED. 380D. Clinical Techniques—Shorthand and Related Subjects Methods, 2 credits.

Development of classroom teaching skills appropriate to applying the principles of theoretical teaching models to teaching psychomotor skills in shorthand and related subjects.

BEOA. 400. Business Report Writing, 3 credits.

Techniques, principles, and standards of organized business report preparation and presentation. Emphasis is placed upon clarity, correctness, and effectiveness in realistic problem solving through formal and informal reports. A study of collecting, organizing, constructing, analyzing, interpreting, and presenting information through various communication media is made.

BEOA. 414. RPG Programming Language (3, Open Lab), 3 credits.

Instruction and actual experience in writing programs, debugging, and machine operation for the Report Program Generator (RPG) programming language oriented toward business applications. Prerequisite: BEOA. or Mgt. 201 or equivalent. (Formerly BEOA. 410.)

BEOA. 431. Advanced COBOL, 3 credits.

Introduction to magnetic tape sequential processing, file updating, DASD sequential processing, COBOL subroutines, segmentation for use with overlays, virtual storage, and Report Writer feature of ANSI COBOL. Prerequisite: BEOA. 324, or instructor approval.

BEOA. 444. Seminar in Programming, 3 credits.

Basic understanding of programming, including extensive readings in the entire field. Prerequisite: BEOA. 201 and 324. (Formerly BEOA. 440.)

BEOA. 454. Systems Analysis, 3 credits.

A basic explanation of the various parts of systems analysis including definitions, functions, philosophies of systems design, and documentation of the system. Pre-
requisites: BEOA. 201 and one of the following: 324, 354, 414, or 431. (Formerly BEOA. 450.)

BEOA. 464. Systems Operation, 3 credits.
Organization and management of a data processing center. Prerequisite: BEOA. 201.
(Formerly BEOA. 460.)

BEOA. 486. Post-Student Teaching Seminar, 1-3 credits.
Analysis of student teaching performance to develop professional teaching objectives for further student growth. Includes the development of specific instructional competencies based on diagnosed needs or development of curricular materials for teaching.

BEOA. 490. Independent Study in Business Education, 1-3 credits each semester.
Designed to give capable students an opportunity to do independent study or research on problems in business education. The study or research must be approved by the Head of the Department.

BEOA. 496 A, B, C. Office Administration Internships, 3-6 credits.
Supervised practica in the areas of data processing, secretarial, and office management. Prerequisite: Advanced standing, department major, and permission of department head.

BEOA. 499. Honors in Business Education and Office Administration, 6 credits.
See catalog description entitled “Graduation with Distinction” and “Graduation with Honors.”

BEOA. 501. Workshops in Business Education, 1-3 credits.
Comprehensive workshops in areas of business education to provide the latest methods of teacher education through in-service education.

BEOA. 505. Seminar in American Business, 3 credits.
A seminar studying the relationship of business education to business and industry to enable the teacher to obtain a better understanding of the free enterprise system. Field trips, consultants, and case studies are essential parts of the course.

BEOA. 540. Seminar in Business Data Processing, 3 credits.
An introduction to electronic computer equipment, with emphasis on applications, system design, and introductory programming. Designed for those with little or no data processing background. (Not available for those who have completed BEOA. 201 or equivalent.)

BEOA. 550. Vocational Education Work Experience, 3 credits.
Develops competences in task analysis and the development of curricular and instructional materials based on approved work experience and classroom activities. (Students work in actual work situations.)
The Distributive Education program is primarily designed to prepare Distributive Education teacher-coordinators to be members of local public school staffs who will teach marketing and related subject matter to students preparing for employment in the field of distribution.

Distributive Education coordinators teach Distributive Education classes in high school, supervise students’ occupational experience programs, and direct programs of adult/continuing education on employee, supervisory, and management levels for those employed in the distributive field.

A Distributive Education Coordinator’s job is stimulating and varied. The coordinator deals with many people—students, businessmen, educators, and parents. In many ways, the position is similar to a training director in business and industry.

The Distributive Education curriculum is closely associated with the Management and Marketing Department, thus providing students alternative career choices in merchandising, selling, buying, business management, and marketing related fields.

Besides being certified for teaching the regular Distributive Education courses, persons are endorsed to teach in the following Distributive Education related options: Hotel/Motel Management, Fashion Merchandising, Marketing, Radio and Television Broadcasting, Education for Employment, and Work Experience and Career Exploration Programs.

Students at James Madison University are able to minor in the following areas along with majoring in Distributive Education: Business Administration, Business Education, Psychology, Secondary Education.

Students interested in any program offered by the Department of Distributive Education should consult Mr. C. B. Dix, Jr., Hoff-6, Hoffman Hall.
MAJOR IN DISTRIBUTIVE EDUCATION  
(B.S. Degree)

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td><strong>GENERAL STUDIES</strong></td>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
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<tr>
<td>History</td>
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<tr>
<td>Fine Arts</td>
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</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
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<tr>
<td>Physical Education</td>
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| **SPECIALIZED REQUIREMENTS** |  |
| **DEPARTMENTAL COURSES** | **CORE COURSES** |
| DE. 340 | 3 | Mgt. 300 | 3 |
| DE./SeEd. 383A | 3 | Mktg. 380 | 3 |
| DE./SeEd. 383B | 3 | Mktg. 387 | 3 |
| DE. 470 | 3 | Mktg. 440 | 3 |
| DE. 475 | 3 | BEOA. 100 | 3 |
| DE. 485 | 3 | BEOA. 201 | 3 |
| Educ. 480 | 8 | BEOA. 330 | 3 |
| | 26 | Educ. 360 | 3 |
| | | Educ. 470 | 3 |
| | | Hth. 370 | 3 |
| | | Hist. 233 or 234 | 3 |
| | | Psyc. 233-234 | 6 |
| | | Mathematics | 3 |
| | | Electives | 17 |
| | | 128 |

Description of Courses

**Distributive Education**

DE. 340  *Organization and Administration of Distributive Education*, 3 credits.

Developments in vocational education and federal legislation affecting the field; organization and history of Distributive Education; objectives of Distributive Education in terms of philosophy of education; overview of program operation and curriculum.

DE./SEED. 383A.  *Clinical Techniques-Distributive Education Methods*, 3 credits.

The principles of individual and group methods, as applied to the teaching of distribution to high school students and adults; preparation of lesson plans; demonstration teaching; vocational approach in relating student’s training to classroom theory; and classroom management and procedures.

DE./SEED. 383B.  *Clinical Techniques-Distributive Education Coordination*, 3 credits.

Selecting and developing training stations; placement of students and developing training plans. Observation and field work in coordination of activities, guidance functions, DECA sponsorships, and public relations methods.
DE. 470. *Organizing and Teaching Adult Distributive Education*, 3 credits.

The teacher-coordinator's responsibilities in continuing education; planning, organizing, promoting, administering, and evaluating the adult program and selection and training of adult instructors. Observations and experience in adult Distributive Education classes in an assigned Virginia community.


An in-depth study of selected Visual Communications Concepts and Practices as it applies to marketing of products and services in distributive businesses. Techniques pertaining to advertising sales promotion, and display are presented.

DE. 485. *Directed Occupation Experience (Summer)*, 3 credits.

In the summer prior to the senior year, the student is employed for a minimum of two months (320 hours) in a position relating to sales and sales supporting activities. The experience is approved and supervised by the college and a duty analysis and evaluation of the experience is required.

DE. 490. *Special Studies in Distributive Education*, 1-3 credits.

Designed to give capable students in Distributive Education an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

DE. 499. *Honors in Distributive Education*, 6 credits.

See catalog descriptions entitled "Graduation with Distinction" and "Graduation with Honors."

EDUC. 480. *Directed Teaching in Distributive Education*, 8 credits.

This directed experience enables the prospective coordinator to apply in the public schools' Distributive Education programs those skills, understandings, and attitudes acquired through all components of the program. The resident coordinator and the teacher-educator develop the practicum plan for the Coordinator in Training.

**OPTION REQUIREMENTS**

Students pursuing certification in the Hotel-Motel, Education for Employment, and Fashion Merchandising Programs should consult with the Head of the Department.

Basically: Students desiring to prepare for the Hotel-Motel option should be prepared to take the majority of their electives in the Hotel-Motel Management Program. Students desiring to teach Education for Employment should minor in Sociology or Psychology or have a majority of their electives in one of these programs. Prospective Fashion Merchandising Coordinators major in Distributive Education and take certain related courses in Home Economics, Management, and Marketing.
DEPARTMENT OF ECONOMICS

Professors Carrier, Hanlon, Kipps, and Zahn; Associate Professors Kohen, Prince, Varghese, and Wilhelm; Assistant Professors Bopp and Sheehan; Instructor McGuire.

The Department of Economics offers programs leading to the Bachelor of Arts and the Bachelor of Science degrees in Economics. The programs are designed to provide the student with alternative paths that lead to careers in business, government and education. The programs also provide a sound basis for graduate work in fields including business administration and law, as well as economics.

The department also offers a minor in economics. Students minoring in economics may choose courses to cover a broad range of subject matter, or they may choose to specialize in a particular aspect of economics.

Seven areas of specialization of five courses beyond principles have been organized. These are offered for the convenience of majors and minors who prefer depth to breadth in their study of economics. The specializations include business and economic forecasting, industrial economics, international trade, labor economics, money and finance, regional economics, and socio-economic problems. Students interested in majoring or minoring in economics should contact the departmental office to discuss the selection of courses of study most suitable to their individual objectives.

MAJOR IN ECONOMICS

The minimum requirement for a major is 33 semester hours in economics including a 6 hour introductory sequence. As many as six credits of work in other departments may be counted toward meeting the 33 semester hours: this work must be relevant to the economics major, and the permission of the Head of the Economics Department is required. Because students’ objectives are diverse, the department offers great flexibility in choosing economics courses in consultation with the major advisor.

MINOR IN ECONOMICS

The minimum requirement for a minor in Economics is 18 semester hours in economics including a 6 hour introductory sequence. Students seeking to meet Virginia certification requirements for teaching economics in secondary schools should meet the requirements for a minor in economics.
## Major in Economics

### (B.A. Degree)

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Principles of Economics</td>
<td>6</td>
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<tr>
<td>(Econ. 130-135 or Econ. 120-125)</td>
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<tr>
<td>Macroeconomics</td>
<td>3</td>
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<tr>
<td>(Econ. 320, 326, 330, 425 or 430)</td>
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</tr>
<tr>
<td>Microeconomics</td>
<td>3</td>
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<tr>
<td>(Econ. 335, 350, 360 or 384)</td>
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<tr>
<td>Electives in Economics (Including at least 6 hours at the 400 level in addition to any 400 level courses used to satisfy the above requirements)</td>
<td>21</td>
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### (B.S. Degree)

<table>
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<tbody>
<tr>
<td>Principles of Economics</td>
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<td>(Econ. 130-135 or Econ. 120-125)</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>(Econ. 330, 425 or 430)</td>
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<td>Microeconomics</td>
<td>3</td>
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<tr>
<td>(Econ. 335 or 384)</td>
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</tr>
<tr>
<td>Statistics</td>
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<tr>
<td>(Econ. 290)</td>
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</tr>
<tr>
<td>Electives in Economics (Including at least 6 hours at the 400 level in addition to any 400 level courses used to satisfy the above requirements)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

Additional requirement: Math. 125 and Math. 205

## Program for a Major (or Minor) in Economics Qualifying for the Secondary Collegiate Professional Certificate

In addition to the General Studies and academic major (or minor) requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

1. Psyc. 233 and 234—*Human Growth and Development* (sophomore year).
2. Educ. 360—*Foundations of Curriculum* (junior year).
3. SeEd. 371H—*Clinical Techniques, Social Science Methods* (normally in the second semester of the junior year or first semester of the senior year).
4. Educ. 470—*History and Philosophy of Educational Thought* (senior year)
   or
   Educ. 471—*Values and Teaching* (senior year).
5. Educ. 480—*Student Teaching* (senior year).
6. A course in U.S. History (anytime in the program).
7. Hth. 370—*The School Health Program* (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.
Description of Courses

Economics

ECON. 120. Survey of Economics, 3 credits.
Provides an understanding of the operation of the American economy and of economic concepts, principles, and relationships basic to intelligent analysis of economic problems. Issues in macroeconomics are emphasized. This course is particularly recommended for education majors to meet certification requirements. (Not recommended for Economics majors). Not open to students who have had Econ. 130 or Econ. 135. (Formerly Econ. 220.)

ECON. 125. Contemporary Economic Problems and Issues, 3 credits.
The study of contemporary American microeconomic problems and issues of a national and multi-national scope. Prerequisite: Econ. 120. (Not recommended for Economics majors, not open to students who have had Econ. 130 or Econ. 135.) (Formerly Econ. 225.)

ECON. 130. Principles of Economics (Macro), 3 credits.
Topics covered include the organization and functioning of the economic system, national income determination, employment and unemployment, money and banking, and economic policy viewed from a broad macro perspective. Not open to students who have had Econ. 120 or Econ. 125. (Formerly Econ. 230.)

ECON. 135. Principles of Economics (Micro), 3 credits.
Topics covered include supply and demand, consumer choice, economics of the firm and industry, production, costs and distribution theory and international trade. Not open to students who have had Econ. 120 or Econ. 125. (Formerly Econ. 235.)

For course description, see Mgt. 290.

ECON. 301. The Soviet Economy, 3 credits.
A study of the evolution and operation of the Soviet economy. Emphasis is given to the institutional framework, the allocation of resources, distribution and consumption, industry, agriculture, trade, growth and recent economic problems. Prerequisites: 3 credits in Economics.

ECON. 302. History of Economic Thought, 3 credits.
Major economic thought from early times to the present. The classical literature will be examined and the important ideas and theories will be analyzed and compared. Prerequisites: 3 credits in Economics.

ECON. 303. Quantitative Methods for Business, 3 credits.
For course description, see Mgt. 303.

ECON. 305. Environmental Economics, 3 credits.
An analysis of the problems of the environment, their causes and alternative proposed methods of solution. Air and water pollution will be stressed as case studies in environmental problems. Prerequisites: 3 credits in Economics.

ECON. 306. The Economics of Women & The Family, 3 credits.
The course will examine facts and theories pertaining to the economic role of women in the labor force and at home. The economics of marriage and the family and of the

Economics   233
marriage contract will be examined. Some emphasis will be placed on the empirical and theoretical explanations of wage differentials between the sexes. Prerequisite: Econ. 125 or Econ. 135.

ECON. 310. Economic History of the United States, 3 credits.
A survey of the economic growth and development of the United States from colonial times to the present. Prerequisites: 3 credits in Economics.

ECON. 311. The Economy of Virginia, 3 credits.
A non-technical study of the basic structure and principle economic relationships which characterize the state's economy. Emphasizes descriptive material and current empirical data rather than theoretical models. Prerequisites: 3 credits in Economics.

ECON. 312. Comparative Economic Systems, 3 credits.
An examination of the distinguishing characteristics, institutions, and functioning of major economic systems in the world today. Prerequisites: 3 credits in Economics.

ECON. 315. Economics of Industrial Relations, 3 credits.
The economics of federal and state regulation of labor unions and their activities; the settlement of industrial disputes, wage determination, regulation of wages and hours, manpower policies, and programs of social protection. Prerequisites: 3 credits in Economics.

ECON. 320. Money and Banking, 3 credits.
Deals with the evolution of money and the banking system, the structure and function of banking, the economics of banking, monetary and credit control, and monetary policy of the United States. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 325. Flow of Funds Analysis and Economic Policy, 3 credits.
An introduction to the macroeconomic principles of flow of funds analysis with emphasis placed on the impact of macroeconomic policy on the flows of funds in the economy particularly loanable funds markets. Prerequisites: Econ. 130-135.

ECON. 326. Public Finance, 3 credits.
Introduction to the field of public finance including theories and principles of taxation, government expenditure, public debt and fiscal administration. Interrelations between federal, state and local finance, shifting and incidence of tax, burden of public debt, principles of debt management, and debt management as a stabilization policy tool are studied. Prerequisites: Econ. 130-135 or Econ. 120-125.

Intermediate level analysis of Keynesian aggregates of supply and demand, consumption, saving, investment, and an appraisal of the government's role in the economy. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 335. Intermediate Economy Theory—Price & Distribution, 3 credits.
Intermediate analysis of the determination of price, resource allocation and product distribution in a free enterprise economy. Prerequisite: Econ. 130-135 or Econ. 120-125.

ECON. 340. Economics of Natural Resources, 3 credits.
Economics of resource preservation, control and use with emphasis given to optimum utilization rates of exhaustible resources. Explicit recognition will be given to trade-off between planning and property rights and to conservation and growth. Prerequisites: Econ. 130-135 or Econ. 120-125.

234 Economics
ECON. 341. Theory of Public Choice, 3 credits.

An indepth analysis of the economic theory of the public sector. Social goals and their relationship to political and fiscal institutions will be discussed. Neutrality efficiency will be emphasized. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 350. Managerial Economics, 3 credits.

Emphasizes the economics of the firm, with special attention to the theory of market behavior. Considers such concepts as production functions, demand functions, cost relationships, pricing theories and practices, supply and output policies, investment policy, forecasting, planning and the economics of decision making. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 355. Economics of Regulated Industries, 3 credits.

A survey of the procedures and impact of government rate setting and taxing on regulated industries in light of the various goals which businesses pursue. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 360. Economics of Labor, 3 credits.

Economic analysis as applied to labor and unions. Attention will be given to wage determination, employment, the collective bargaining process, the labor movement, labor problems and labor management relations. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 365. Economic Development, 3 credits.

A study of the characteristics of under-development, theories of economic development and the underlying causes for varying standards of living among the world’s people. Considerable time will be spent on studying social and cultural factors that influence economic growth, and their potential affect on the economic progress of the lesser developed countries. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 366. Economics of the Life Cycle, 3 credits.

Focuses on application of economic analysis—theoretical and factual—to human decision making at critical points in the life cycle. A main focus will be labor-market-related behavior and decisions of youth, prime-aged and middle-aged workers. Some emphasis will be on the behavior related to retirement. Prerequisite: Econ. 125 or 135.


An examination of the Classical and Modern theories of international trade; the effects of such trade on the domestic economy; the case for free international trade; barriers to free trade; the rationale and economic impacts of various trade policies and a review of U.S. Commercial policy. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 372. International Finance and Payments, 3 credits.

Mechanics and techniques of international finance, exchange markets and financial markets, categories of international financial flows and the balance of payments, international monetary institutions and arrangements and proposals for international monetary reform. Prerequisites: Econ. 130-135 or Econ. 120-125.

ECON. 382. Urban Economics, 3 credits.

A detailed examination of the economic aspects of urbanization with emphasis on metropolitan land use and location theory. Urban problems considered include housing, poverty, labor markets, and municipal finances. Prerequisites: Econ. 120-125 or Econ. 130-135.
ECON. 384. Mathematical Economics, 3 credits.

Course employs techniques of differentiation and integration for microeconomic and macroeconomic analysis at the intermediate level. Prerequisites: Econ. 130-135 or Econ. 120-125 and Math. 125-205.

ECON. 385. Econometrics, 3 credits.

An examination of the techniques of econometric analysis. Course discusses the construction of models based on economic theory, development of a hypothesis from a model and the testing of hypotheses concerning the relationship between variables with single equation regression methods. Prerequisites: Econ. 130-135 or Econ. 120-125 and Econ. 290, Mgt. 290 or Math. 220.

ECON. 405. Political Economy, 3 credits.

Empirical, institutional, and methodological analysis of the interaction between economics and politics in the United States as it affects the distribution of wealth, the form, and nature of other American domestic and international economic policies. Prerequisites: 12 credits in Economics.

ECON. 425. Stabilization Policies, 3 credits.

Examination of the role and scope of Stabilization Policies in a capitalistic economy. Primary emphasis will be given to the macroeconomic problems of cyclical fluctuations in aggregate economic activity, unemployment, price instability, disequilibrium in the balance of payments and inadequate rate of economic growth. Alternative stabilization policies will be identified and evaluated. Prerequisites: one of the following: Econ. 320, 326, 330, or 384.

ECON. 430. Monetary Theory, 3 credits.

Examines the various theories dealing with the relationship between the demand for, and supply of, money on the one hand and the levels of output, employment, prices and interest rates on the other. Prerequisites: one of the following: Econ. 320, 330 or 384.

ECON. 445. Industrial Organization, 3 credits.

A survey of applied economics emphasizing the role of price, advertising, and product quality variations in imperfectly competitive markets. Prerequisites: Econ. 290 or Math. 220 or Mgt. 290 and one of the following: Econ. 335, 340, 341, 350, 355, 384, or 385.

ECON. 460. Human Resources, 3 credits.

Examines the role of education and training in enhancing production skills, employment opportunities, and income as well as of manpower, health and welfare policies as they relate to the labor market and to economic and sound development. Attention will be given to empirical studies. Prerequisites: one of the following: Econ. 305, 330, 335, 340, 350, 360, 366, 384, or 385.


Examination of the concept of equilibrium, measures of disequilibrium and adjustment mechanisms in international payments and their policy implications under different types of international monetary arrangements. Evolution of the international monetary system from the early gold standard to the present will be reviewed to shed light on the evolving monetary arrangements for the future. Prerequisites: Econ. 370 or permission of instructor.
ECON. 475. Regional Economics, 3 credits.
A study of local and subnational economies viewed as integral parts of a unified system. Emphasis will be given to the basic economic forces associated with regional growth and decline and related public policy considerations. Prerequisites: one of the following: Econ. 311, 335, 340, 341, 365, 370, 382, or 384.

ECON. 480. Senior Seminar in Economics, 3 credits.
Relates economic theory to contemporary issues. It is designed for economics majors about to graduate, and is intended to prepare them to apply their knowledge of economics to the real world problems they are about to face. Within the economic framework, each student is afforded the opportunity to work on the specific subject of his/her choice. Prerequisites: senior standing and a major or minor in economics.

ECON. 485. Economic Forecasting, 3 credits.
Surveys differentiating forecasting techniques from elementary forms to more advanced methods including econometrics, spectral and input-output analysis. Special emphasis is placed on regional and national forecasting. Prerequisite: Econ. 385.

ECON. 490. Special Studies in Economics, 1-3 credits each semester.
Designed to give capable students in Economics an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

ECON. 501. Workshop in Economics, 1-6 credits.
Provides detailed study of economics topics. Designed primarily for elementary and secondary teachers.

ECON. 506. Quantitative Analysis I, 3 credits.
For course description, see Mgt. 506.

ECON. 524. Economic Analysis, 3 credits.
Analysis and synthesis of micro and macro economic concepts.
DEPARTMENT OF HOME ECONOMICS

Dr. Dorothy Rowe, Head of the Department

Professors M. Christiansen and Rowe; Associate Professor Emerson; Assistant Professor Grove; Instructors Erlewine, Godley, and G. Steinberg.

The Home Economics Department offers programs which lead to professions serving homes, families, and the community. Although the Home Economics Department has traditionally educated Vocational Home Economics teachers for the public schools and dietitians for hospital dietetics and other food service systems, the expanded mission of the department further educates teachers for occupational education in the vocational program, and educates dietitians to fill the multi-roles in food service and health care. The curriculum in General Home Economics provides the student with a broad base of Home Economics knowledge and skills along with a concentration of study in one of several areas which prepare for entry level positions in dress design, child day care, family services (extension), interior design, and fashion merchandising. The Department participates in the Interdisciplinary Program in Hotel-Restaurant Management.

The Vocational Home Economics major meets the requirements established by the Vocational Division of the United States Office of Education and the standards set by the State Department of Education.

The major in dietetics meets the academic requirements set by the American Dietetic Association. Graduates are eligible for appointment to dietetic internships approved by the American Dietetic Association.

With careful planning, a double major in several areas of Home Economics can be accomplished.

The minimum requirement for a minor in Home Economics is 18 semester hours.

Students interested in a program in the Department of Home Economics should consult Dr. Dorothy Rowe, 210 Moody Hall.

MAJOR IN HOME ECONOMICS EDUCATION
(B.S. Degree)

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238 Home Economics
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**MAJOR IN DIETETICS**
(B.S. Degree)

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*Home Economics 239*
MAJOR IN GENERAL HOME ECONOMICS
(B.S. Degree)

The major in General Home Economics prepares the student as a generalist in Home Economics with beginning knowledge in each of the areas of Home Economics. In addition, the program allows for a selection of courses to provide a concentration of study in one of these areas: Child Day Care, Dress Design, Family Services (Extension), Fashion Merchandising, and Interior Design.

CONCENTRATION: CHILD DAY CARE

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CONCENTRATION: DRESS DESIGN

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240 Home Economics
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CONCENTRATION: FAMILY SERVICES (EXTENSION)

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Home Economics 241
## CONCENTRATION: FASHION MERCHANDISING

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<th>Credit Hours</th>
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<tr>
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## CONCENTRATION: INTERIOR DESIGN

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<td>Art 141</td>
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<td>HE. 290</td>
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242  Home Economics
HE. 350  3  HE. 495  2  
HE. 355  3  Electives  11  
HE. 375  3  31  
Psyc. 231  3  
Electives  5  32

Description of Courses

Home Economics

HE. 100. *The Home Economics Profession*, 1 credit.
Role and scope of Home Economics with emphasis upon historical perspectives and career opportunities.

HE. 110. *Aspects of Dress*, 3 credits.
An environmental approach to the study of dress through the physical, cultural, economic, psychological, emotional, aesthetic, and sociological influences.

HE. 133. *The Contemporary Family*, 3 credits.
Concepts of variations in forms and lifestyles of families, including individuals in contemporary societies. Special emphasis on tasks of families such as socializing children, developing individual abilities to meet demands of society, and providing a setting for a satisfactory living environment.

HE. 140. *Foods* (2, 2), 3 credits.
The basic principles of preparation of foods are the main emphasis in this course. Introduction is made to menu planning and food service. Laboratory activities are planned to acquaint the student with desirable standard products in each food group.

HE. 215. *Contemporary Clothing Construction* (1, 4), 3 credits.
The practicing of principles of clothing construction suitable for current fabrics and fashions. (*Formerly HE. 210.*)

Explanation of factors influencing selection and application of design as it relates to the interior environment. Emphasis on residential interiors and the needs of the individual.

HE. 255. *Human Shelter*, 3 credits.
Analysis of the emotional and physiological aspects of shelter, social effects of shelter, selection and adaptation of shelter, economics of shelter, and social concerns of shelter as each relates to the needs of the individual. (*Formerly HE. 450.*)

Basic nutrition as a component of contemporary life. (*Formerly HE. 180.*)

HE. 290. *Textiles*, 3 credits.
A general study of the physical and chemical characteristics of the natural and man-made fibers in relation to their selection, care, and use.
HE. 300. Child Development, 3 credits.
A study is made of factors involved in the physical, intellectual, social, and emotional growth of the young child. Special emphasis is given to the importance of family relations. The student has opportunities to work with young children both in the community and in the campus nursery school. Prerequisites: Psyc. 231, Psyc. 233 or equivalent.

HE. 305. Adult Education for Home and Family Life, 3 credits.
Focus is on education for home and family life. Nature of education of adults with emphasis on understanding continuing education as a way of life, needs and interests of adults and basic principles of successful programs in consumer and homemaking.

HE. 310. Tailoring Techniques (1, 4), 3 credits.
The values and qualities of tailoring are studied and applies to a custom tailored garment. Prerequisite: HE. 215 or equivalent.

HE. 320. Consumer Economics, 3 credits.
Study of the nature of problems facing consumers in the marketplace. Special emphasis on forces influencing consumer demand, marketing practices and the role of the consumer, businesses and government in the effective dispersal of consumer goods and services.

HE. 330. Family Relations, 3 credits.
A study of the relations in modern family living with emphasis on dating, courtship, marriage, marital adjustments, and intergeneration relations.

HE. 343. Demonstration Techniques (1, 4), 3 credits.
The use of the lecture-demonstration for imparting knowledge is the basis of this course. Laboratory experiences are provided to demonstrate how the home economist can effectively use this technique. Prerequisite: HE. 140 or equivalent. Offered in alternate years.

HE. 350. Related Arts (1, 4), 3 credits.
This course involves selection and restoration of furniture and accessories for the home. Laboratory experiences, varying according to the students' interests, include activities such as refinishing furniture, caning seats, needlepoint, and rug braiding. Includes related field trips.

HE. 355. Household Equipment (2, 2), 3 credits.
Principles involved in construction, operation, use, selection, and safety of household equipment. Laboratory experiences with appliances for food preparation, care of the home, and clothing construction.

HE. 363. Food Production Management (2, 4), 3 credits.
The principles of quantity food production and service are studied. Prerequisites: HE. 140, HE. 280 or equivalent.

HE. 370. Personal and Family Finances, 3 credits.
Major financial alternatives available to families during the beginning, expanding, launching and retirement stages of the family life cycle or other variations in living styles. Implications for the community of the family's financial decisions.

HE. 375. Home Management, 3 credits.
Interrelationship of all the components of management in the family as a means of realization of family goals. Prerequisites: HE. 100, 110, 133, 140, 255, 280 or equivalent.

244 Home Economics
HE. 378. Home Management for the Aging, 3 credits.
A study of gerontology which emphasizes home management. The course presents
the problems unique to the aged in relation to food, clothing, housing, personal relations
and reveals how effective management might alleviate some of the problems.

HE. 380. Advanced Nutrition, 3 credits.
A study of the nutrients, their roles in intermediary metabolism, the effects of genet-
ic errors in metabolism, nutritional deficiencies, and means of assessing nutritional status.
Agencies and programs concerned with nutrition and health, and current trends in nutrition
research are emphasized. Experimental animals are used for feeding studies. Prerequi-
sites: HE. 280, physiology, biochemistry, and organic chemistry. Offered in alternate
years.

HE. 384. Child Nutrition, 3 credits.
A study of the nutritional needs and development of food habits of infants, young
children, and adolescents. Nutrition education in the classroom and teaching of children
are emphasized. Prerequisite: HE. 280 or equivalent.

An introduction to procedures and practices involved in the profession of interior
design. Emphasis on preparing student for interior design practicum.

HE. 405. Program Management for Child Day Care, 3 credits.
Organization and operation of the family day care home and the day care center with
emphasis on facilities, program, records, and parent involvement. Prerequisite: HE. 300
or equivalent.

HE. 410. Flat Pattern Design and Construction (1, 4), 3 credits.
A study of the scope of the clothing area and an understanding of the world of fash-
on. Creativity is stressed in the designing of garments. This course offers an opportunity
to achieve a better knowledge of garment-fitting. Prerequisite: HE. 215 or equivalent.

HE. 445. Advanced Foods (1, 4), 3 credits.
A further study of foods emphasizing the combination of scientific and esthetic food
principles, understanding of domestic and foreign terms, and management of time in food
preparation. The laboratory provides opportunity to become familiar with gourmet foods
and their preparation. Prerequisite: HE. 140 or equivalent. Offered in alternate years.

HE. 446. Experimental Foods (1, 4), 3 credits.
An introduction to research in foods. Different techniques of food preparation are
studied and evaluated for most acceptable methods to obtain standards food products.
Prerequisites: HE. 140 and organic chemistry or the equivalent.

HE. 476. Introduction to Contemporary Women, 3 credits.
Study of the problems facing women in today’s society. Special emphasis on social-
ization of women, psychological problems of role adjustment, economic and legal bar-
riers for women, and home economics concern of strengthening the family unit.

HE. 484. Diet Therapy (2, 2), 3 credits.
A study of the use of diet in preventing illness and as a means of treating disease.
Emphasis is given to patient education. Prerequisites: HE. 380 and Chem. 238 or equiva-
 lent. Offered in alternate years.

Home Economics 245
HE. 490. Field Experience Practicum, 1-3 credits.

Opportunity for students to participate in field experiences relating to their major area of home economics and their career goals under the coordination and direction of a home economics staff member. On the job supervision will be provided by the participating center. (Application for enrollment must be completed through the Home Economics Department Head one semester prior to registration.)

HE. 491. Independent Study in Home Economics, 1-3 credits.

Capable students may elect to do independent study in a selected area of home economics under faculty supervision. Course may be taken only when all courses offered in the selected area of home economics have been completed. (Application for enrollment must be made through the Home Economics Department Head one semester prior to registration.)

HE. 493. Fashion Merchandising, 3 credits.

A conceptual analysis of the nature and scope of fashion emphasizing the various aspects of design, production and distribution.

HE. 494. Fashion Merchandising Internship, 8 credits.

Fashion merchandising experience will be offered in retail stores under the coordination and direction of a home economics faculty member. Course must be taken on the eight week block as scheduled and no other courses may be taken at the same time. (Application must be completed through the Home Economics Department Head one full semester prior to registration for the course.) Prerequisite: HE. 110, 215, 290, 320, 493; Mktg. 380, 387, 400, 440; Mgt. 300, 489; BEOA. 330.

HE. 495. Senior Seminar, 2 credits.

The nature and philosophy of Home Economics as supported by current research and publications.

HE. 499. Honors, 6 credits. Year Course.

HE. 501. Workshop in Home Economics, 1-3 credits.

Workshops in different areas of home economics will be offered as student needs indicate. This course is designed expressly for continuing education. It can be repeated as frequently as the area of emphasis is changed.

Home Economics Education

HE./SEED. 303. Clinical Techniques-Home Economics Education Methods, 3 credits.

Students are provided experiences which help them formulate a philosophy of homemaking. Emphasis is placed upon principles of learning, studies of communities, instructional materials, and analysis of concerns of youth as a basis for cooperatively planning home and school activities. Prerequisites: Psyc. 233-234 or equivalent.

HE. 305. Adult Education for Home and Family Life, 3 credits.

Focus is on education for home and family life. Nature of education of adults with emphasis on understanding continuing education as a way of life. Needs and interests of adults and basic principles of successful program in consumer and homemaking.

HE. 400. Vocational Home Economics, 3 credits.

A critical survey of the development of Home Economics is made with emphasis upon curriculum development reflecting implications of the Vocational Education Act of 1968 for secondary schools. Prerequisite: HE./SeEd. 303 or equivalent.

246 Home Economics
HE. 404. *Home Economics in Occupational Training*, 3 credits.

A study of procedure for organization of program and development of curriculum for occupational training programs in Food Service Occupations; Child Care Service Occupations; Clothing Service Occupations; and Home and Institutional Service Occupations with practical experience provided in each program.


The student assumes the responsibility for teaching in a junior or senior high center under the supervision and direction of the resident supervisors. The student visits in the homes of the pupils in the community, attends professional meetings, and participates in the activities of the school and community. Prerequisites: HE. 400 and permission of Department Head.
The Department of Management and Marketing offers a program leading to the Bachelor of Business Administration (B.B.A.) with majors in Management, Marketing, and Management Information Systems. These programs are designed to prepare students for managerial positions in business and certain non-profit organizations. With additional course work offered by the Department of Political Science, the program prepares the students for administrative positions in government.

A summary of the B.B.A. Program Requirements is shown below:

<table>
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<th>Requirements</th>
<th>Credit Hours</th>
<th>Courses</th>
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<td>Eng. 101-102</td>
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<td>Additional General</td>
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<td>Fine Arts</td>
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<td>Core Requirements-B.B.A.</td>
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<td>Comm. 200</td>
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<td>Major Requirements</td>
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<td>Free Electives</td>
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<td>History</td>
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Bachelor of Business Administration Degree Program

| General Studies        | 43 Hours | Core Requirements | 36 Hours |
| Courses                | Credit   | Courses            | Credit   |
| Eng. 101-102           | 6        | Mgt. 201           | 3        |
| Fine Arts              | 3        | Actg. 241-2        | 6        |
| Comm. 200              | 3        | Mktg. 380          | 3        |
| Econ. 130-135          | 6        | Mgt. 300           | 3        |
| History                | 6        | Mgt. 290           | 3        |
| Humanities             | 6        | Mgt. 303           | 3        |

248 Management and Marketing
Math. 125 3
Natural Science 8
Physical Education 2
Total 43

Six additional hours consisting of Math. 205 and Mgt. 215 are required of students majoring in Management, Marketing, or Management Information Systems:

Math. 205 3
Mgt. 215 3
Total 6

MAJOR IN MANAGEMENT
(B.B.A. Degree)

Freshman Year Credit Hours Sophomore Year Credit Hours
Eng. 101-102 6 Actg. 241-242 6
History 6 Math. 205 3
Humanities 6 Mgt. 201, 215, 290 9
Math. 125 3 Econ. 130, 135 6
Fine Arts 3 Comm. 200 3
Natural Science 8 Free Electives 4
                                    PE. 2
                                    Total 32

Junior Year Credit Hours Senior Year Credit Hours
Mgt. 300 3 Mgt. 487 3
Mgt. 303 3 Mgt. 489 3
Fin. 345 3 Mgt. 491 3
Actg. 316 or 495 3 Electives from Mgt., Mktg., Actg., or Fin. 9
Mgt. 480 3 Free Electives 12
Mgt. 486 3 12
Mktg. 380 3 30
Econ. (300 or 400 level) 3 30
Mgt. 307 3 30
Actg. 375 3 30
Free Elective 3 30
                                    Total 33

MAJOR IN MANAGEMENT INFORMATION SYSTEMS
(B.B.A. Degree)

Freshman Year Credit Hours Sophomore Year Credit Hours
Same as Management

Management and Marketing 249
Credit Credit

Junior Year
Credit Hours
Mgt. 300 3
Mgt. 303 3
Fin. 345 3
Actg. 316 or 495 3
Mktg. 380 3
Econ. (300 or 400 level) 3
Mgt. 307 3
Mgt. 324 3
Mgt. 486 3
Free elective 6 33

Senior Year
Credit Hours
Mgt. 454 3
Mgt. 467 3
Mgt. 487 3
Electives from Mgt., Mktg., Actg., or Fin. 9
Free Elective 12 30

MAJOR IN MARKETING
(B.B.A. Degree)

Credit Credit

Freshman Year
Credit Hours
Same as Management

Sophomore Year
Credit Hours

Junior Year
Credit Hours
Mgt. 300 3
Mgt. 303 3
Fin. 345 3
Actg. 316 or 495 3
Mktg. 380 3
Econ. (300 or 400 level) 3
Mktg. 382 3
Mktg. 386 3
Mgt. 486 3
Free elective 6 33

Senior Year
Credit Hours
Mgt. 487 3
Mktg. 315 3
Mktg. 400 3
Mktg. 485 3
Electives from Mgt., Mktg., Actg., or Fin. 9
Free elective 9 30

MINOR IN BUSINESS ADMINISTRATION

OPTION 1:
The minimum requirement for a minor in Business Administration is 18 hours consisting of Actg. 241 (Elementary Accounting), Mktg. 380 (Marketing Fundamentals), Mgt. 300 (Principles of Management), Fin. 345 (Managerial Finance), and Actg. 316 or Actg. 495 (Legal Environment of Business or Business Law I) and Econ. 130 or Econ. 135 or Econ. 120 (Principles of Economics or Survey of Economics).

OPTION 2:
Many students complete their undergraduate degree in a field other than business and then go on to work toward a Master of Business
Administration (MBA) degree. This combination provides many good career opportunities. The non-business major who takes the following courses as an undergraduate can then go on and obtain a MBA at James Madison University in one additional year: Mgt. 506 (Quantitative Analysis I), Econ. 524 (Economic Analysis), Actg. 515 (Financial Accounting), Mgt. 531 (Management Systems), Mktg. 574 (Marketing Analysis) plus one business elective approved by the MBA advisor. The 500 level courses are not required in the MBA program, so they can be counted as free electives for the non-business major.

Description of Courses

Management

MGT. 201. Computer Applications, 3 credits.
For course description, see BEOA. 201. (Formerly BuAd. 301.)

A basic introduction to psychology in industrial settings. Content includes worker efficiency, selection of employees, placing and training employees, and organizational management. (Formerly BuAd. 215.)

MGT. 216. Principles of Industrial Psychology II, 3 credits.
Motivation of workers, communications, leadership, work groups, hierarchical organization and unionization.

Application of statistical methods to business and economics. Introduces frequency distributions, averages, dispersion, probability, sampling, statistical inference, regression, correlation and decision making under uncertainty. Prerequisites: Math. 125 and 205. (Formerly BuAd. 290.)

MGT. 300. Principles of Management, 3 credits.
Principles of business management, decision processes, management functions, business resources, organization, and control. (Formerly BuAd. 280.)

MGT. 303. Quantitative Methods for Business, 3 credits.
The application of quantitative methods to decision making. Emphasis is placed on marginal decision analysis, linear programming, inventory concepts, and queuing models. Also introduces network concepts, dynamic programming, Markov analysis, and simulation. Prerequisite: Mgt. 290 (Formerly BuAd. 303.)

Introduction to management information systems; computer role in MIS; planning, programming and implementation of MIS; MIS systems concepts and decision making. Prerequisite: Mgt. 201. (Formerly BuAd. 307.)

MGT. 324. COBOL Programming Language, (3, Open Lab), 3 credits.
For course description, see BEOA. 324. (Formerly BuAd. 324.)

MGT. 341. Assembler Language Programming for Business, 3 credits.
For course description, see BEOA. 341. (Formerly BuAd. 341.)
For course description, see BEOA. 354. (Formerly BuAd. 354.)

MGT. 366. *Public Personnel Administration*, 3 credits.  
For course description, see PoSc. 366. (Formerly BuAd. 366.)

MGT. 414. *RPG Programming Language*, (3, Open Lab), 3 credits.  
For course description, see BEOA. 414. (Formerly BuAd. 414.)

For course description, see PoSc. 420. (Formerly BuAd. 420.)

MGT. 431. *Advanced COBOL*, 3 credits.  
For course description, see BEOA. 431. (Formerly BuAd. 431.)

MGT. 444. *Seminar in Programming*, 3 credits.  
For course description, see BEOA. 444. (Formerly BuAd. 444.)

MGT. 454. *Systems Analysis*, 3 credits.  
For course description, see BEOA. 454. (Formerly BuAd. 454.)

For course description see BEOA. 464. (Formerly BuAd. 464.)

MGT. 467. *Advanced Information Systems*, 3 credits.  
Designed for the MIS practitioner of the future, a course that examines aspects of long-range planning—including new hardware, software, potential managerial problem areas, personnel projections, and new concepts. Includes analysis of comparative management information systems. Prerequisite: Mgt. 307. (Formerly BuAd. 467.)

Planning the legal, financial, and administrative structure of small business. Includes specific categories of management, such as, inventory, accounts receivable, accounts payable, financing, cost control, tax, and profit planning.

MGT. 480. *Production Management*, 3 credits.  
Deals with the organization and operation of industrial enterprises. Emphasis given to management of the physical plant and the processes of production. Prerequisite: Mgt. 300 and Mgt. 303. (Formerly BuAd. 480.)

Theory of decision making, rationality, individuals as decision makers, quantitative and qualitative techniques and case studies of application. Prerequisites: Mgt. 303, Mgt. 486 or permission of instructor.

A study of human behavior and motivation in the business organization. Behavioral science research in administration is discussed and applicability to organizational behavior is treated. Prerequisite: Mgt. 300. (Formerly BuAd. 486.)

Deals with the field of policy making and administration at the various levels of management, including overall company policies and departmental policies. Prerequisites: Mgt. 300, Mktg. 380, Fin. 345. (Formerly BuAd. 487.)
MGT. 489. Personnel Administration, 3 credits.
A study of employer-employee relationships in business and industry, including personnel policies and methods, selection, placement, training, and promotion of employees, and recent trends in employment practices. Prerequisite: Mgt. 300. (Formerly BuAd. 489.)

MGT. 490. Special Studies in Management, 1-3 credits each semester.
Designed to give capable students in Management an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.) (Formerly BuAd. 490.)

MGT. 491. Business Simulation Analysis, 3 credits.
An integration of the functional business areas of economics, production, marketing, and finance by simulating the total activities of a business firm. (Formerly BuAd. 491.)

MGT. 494. Business Practicum, 3-6 credits.
A course to be taken by graduating seniors which would give the student an opportunity to work in and with local industry in order to gain an insight into the real side of modern business. (Formerly BuAd. 494.)

MGT. 506. Quantitative Analysis I, 3 credits.
Probability theory and its applications to decision making in the corporation. Topics covered include frequency and sampling distributions, hypothesis testing, and estimation. Not open to undergraduate business majors. (Formerly BuAd. 506.)

MGT. 531. Management Systems, 3 credits.
Concepts of business management, decision processes, management functions, and business resources presented in the framework of an integrated systems overview of the firm. Not open to undergraduate business majors. (Formerly BuAd. 531.)

Emphasizes development and implementation of national labor policy. Organization of labor unions, analysis of bargaining power, bargaining strategy and tactics of unions and management, and the current economic and social impact of organized labor. (Formerly BuAd. 540.)

Description of Courses

Marketing

MKTG. 380. Marketing Fundamentals, 3 credits.
Deals with fundamentals involved in the marketing process; concerned with the functions, institutions and channels used to distribute goods and services from producer to consumer. (Formerly BuAd. 260.)

MKTG. 382. Marketing Research, 3 credits.
Deals with the collection, interpretation, and presentation of marketing information to aid the shaping of marketing objectives, policies and decisions. Includes analytic techniques, methodology and sources of data. Prerequisite: Mktg. 380. (Formerly BuAd. 382.)
MKTG. 384. *Marketing for Non-Profit Organizations*, 3 credits.

Complete discussion of marketing for managers and administrators of nonprofit organizations. Discusses how to market products, services, persons, places, organizations, and ideas. Discusses the major concepts and tools of marketing. *(Formerly BuAd. 384.)*

MKTG. 385. *Consumer Behavior*, 3 credits.

Fundamental knowledge of the psychological principles underlying consumer behavior. *(Formerly BuAd. 315.)*

MKTG. 386. *Transportation and Distribution*, 3 credits.

A study of the modes of transportation and other functional processes within a physical distribution system. The systems approach to physical distribution is stressed, and elementary quantitative tools of physical distribution management are introduced. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 386.)*


Designed to give the student an understanding of many of the aspects of personal selling including preparing for selling, selling techniques, and the role of selling in our society. These activities are also examined from an administrator’s point of view through the eyes of the sales manager. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 387.)*

MKTG. 390. *Industrial Marketing*, 3 credits.

An analysis of the policies and procedures in marketing to industrial buyers, consideration of special problems connected with the purchase, distribution, pricing, promotion, and development of industrial goods and services. *Prerequisite: Mktg. 380.*

MKTG. 400. *Advertising*, 3 credits.

A survey of all forms of advertising; economic aspects of advertising, layout, campaigns, media, and government control. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 400.)*


A study of the operation and service activities as functions of store management. Areas of store location and layout, customer service, receiving, marketing and store protection are stressed. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 440.)*

MKTG. 460. *International Marketing*, 3 credits.

A study of the marketing concepts and analytical processes in international marketing operations. Emphasis is placed on comparative differences in markets, marketing functions, and legal, socio-economic, and cultural considerations in marketing overseas. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 460.)*


An application of the theories and principles of management and marketing to the solution of practical problems of marketing tasks are emphasized. *Prerequisite: Mktg. 380.* *(Formerly BuAd. 485.)*

MKTG. 490. *Special Studies in Marketing*, 1-3 credits each semester.

Designed to give capable students in Marketing an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.) *(Formerly BuAd. 490.)*

254 Management and Marketing
MKTG. 494. *Business Practicum*, 3-6 credits.

A course to be taken by graduating seniors which would give the student an opportunity to work in and with local industry in order to gain an insight into the real side of modern business. *(Formerly BuAd. 494.)*

MKTG. 574. *Marketing Analysis*, 3 credits.

Analysis, planning and control of the marketing function viewed as an integral part of the total operation of the firm. Includes consumer behavior, pricing, and channels of distribution. Not open to undergraduate business majors. *(Formerly BuAd. 574.)*

MKTG. 582. *Marketing Research and Analysis*, 3 credits.

Study of the role of research in marketing decision-making, the research process, scientific method, analysis and interpretation of research findings. *Prerequisite: Mktg. 574 or equivalent.* *(Formerly BuAd. 582.)*
The School of Education at James Madison University recognizes that research has demonstrated that personal characteristics of competent, teacher behavior and perceptions of self and perceptions of others are directly related to effective teacher training and preparation.

The School of Education at James Madison University recognizes that the development of effective teacher behavior and perceptions of self and perceptions of others are directly related to effective teacher training and preparation.

School of Education
SCHOOL OF EDUCATION

Dr. Julius B. Roberson, Dean
Dr. Lillian P. Jennings, Assistant Dean

The School of Education has as its central purpose the preparation of professionals for service in the public schools and other human service agencies of Virginia. The undergraduate teacher preparation programs are accredited by the National Council for Accreditation of Teacher Education (NCATE), and they have met the criteria for “Standards for Approval of Teacher Preparation Programs in Virginia” as established by the State Board of Education.

The School of Education includes the Departments of Elementary and Early Childhood Education, Psychology, Special Education, Physical and Health Education, Secondary Education and School Administration, Speech Pathology and Audiology, and Library Science and Educational Media. In addition, the Office of Student Teaching, the Child Study Center, the Anthony-Seeger Campus School and the Department of Military Science are located within the School of Education. The School offers nine programs leading to the baccalaureate degree.

Through a combination of classroom, laboratory and field-based experience students are prepared for the teaching and allied professions. The planned courses of study are designed to enable the individual student to obtain the necessary competencies which enable him/her to function effectively in his/her profession and society.

DEPARTMENTS

Elementary and Early Childhood Education . . . . Dr. Charles W. Blair, Head
Library Science and Educational Media . . . . Dr. Raymond C. Ramquist, Head
Physical and Health Education . . . Dr. Marilyn Crawford, Head
Psychology . . . . . . . . . . . . . . Dr. Harold J. McGee, Head
Secondary Education and School Administration . . . . Dr. William D. Smith, Head
Special Education . . . . . . . . . Dr. Frank W. Luth, Head
Speech Pathology and Audiology
Child Study Center . . . . . . Dr. Hubert R. Vance, Director
Anthony Seeger Campus School . . . . . . . Mr. C. Kenneth Landes, Director
PROFESSIONAL EDUCATION SEQUENCE

The School of Education of James Madison University recognizes that research has defined what characteristics the competent teacher exhibits. Research indicates that the dimensions of (a) personal characteristics, (b) instructional procedures and interaction style, (c) perceptions of self, and (d) perceptions of others, are directly related to effective teacher behavior and personality.

With this research as a base, the School of Education feels that the total development of our students in teacher education deserves major emphasis. Each course is a developmental layer that builds upon prior educational experiences, thus enlarging the experiences which will allow for full maturity of a student's capabilities. Continuity of the sequence of knowledge and understanding is essential, if the unfolding of a mature, capable teacher is to be the product. The end product of the required experiences should produce a teacher capable of exerting a positive influence upon the instructional process for the young people in his/her charge.

In addition to specific subject preparation, the required courses in the process are:

Step I. A. Psyc. 233: Human Development

This is a basic introductory course for all students in teacher education. It incorporates an overview of human development and learning theories as well as a thorough introduction as to how these are implemented in classroom settings.

B. Course Options—Psyc. 369, 234

These are the options for students continuing in the sequence. Each course allows a student to concentrate in-depth, in his/her selected area of study as to the developmental level of the school child with whom he/she chooses to work.

Psyc. 369 is to be selected by students continuing toward graduation and certification in Early Childhood Education (NK-3). This course covers knowledge and understandings needed by teachers who would work successfully with children of this age range from three through eight or nine. The key themes throughout are developmental concepts required for establishing successful learning climates for children.

Psyc. 234 is to be selected by students continuing toward graduation and certification in all grade levels from four through twelve. The same key themes are continued throughout the coursework outline.
Each department has the privilege of adding to these options provided the offering is approved by the sponsoring department and the Dean of the School of Education.

Practicum experiences or observations in a public school setting are required in this step of the sequence so students can decide for themselves whether or not working with children is their desired role, and if so, with children at what level.

For students planning to seek teaching certification, Psyc. 233-34 must be a part of their professional education sequence. Therefore these courses may not be used to fulfill their General Studies Social Science option.

Additional information may be found in the Department of Psychology section.

**Step II. Educ. 360—Foundations of Curriculum**

This course is “a study and evaluation of factors, ideas, and issues which influence the public school curriculum. Consideration is given to such topics as: basic ideas which influence organization and content; various programs found in theory and practice; and the scope and consequence of the curriculum.” Practicum experiences are a part of this course. This should provide students with a knowledge of the roles of the federal government, the states, and local governments in American education. Understandings of the roles of professional organizations, pressure groups, etc., are examined.

**Step III. Methodology Coursework**

These courses at the elementary school level are designed to provide a series of courses and experiences developed to assure competence in the subject areas required for those levels. Methods courses are required for art, music, reading (developmental and diagnostic), science/mathematics, and general materials preparation. These courses are currently a part of the requirements for teacher certification.

At the secondary school level methods coursework is required in each major area for which certification is sought.

Practicum experiences are required as a part of this over-all methods sequence. Clinical techniques such as micro-teaching, role-playing, and video-tape review should be a part of this step in the sequence.

**Step IV. Educ. 470—History and Philosophy of Educational Thought**

This is a “critical analysis of current problems in education as they relate to the major philosophies of modern education.” Incorporated
here are understandings of the major concepts in American education, some comparisons with other educational systems, and a general overview of laws and codes that govern our public education system.

Step V. Educ. 480—Directed or Student Teaching

The major purpose of directed teaching is to enable the preservice teacher to apply, in the public school classrooms and comprehensive child development programs, those skills, understandings, and attitudes acquired in all components of teacher education. Under the guidance of cooperating teachers and university supervisors the student is provided activities designed to familiarize him/her with all aspects of the classroom teacher's role.

This experience should be the culmination of the professional sequence for the preparation of teachers. The prerequisites for this experience are all the other steps in the sequence. Initial screening of the students should have occurred at all levels of the sequence and this final student teaching experience should unfold as one for which the student is totally prepared and suited.

This student teaching sequence must be in the area(s) for which the student is seeking certification endorsement. If the student is seeking endorsement in more than one general area, the student teaching sequence must be experienced in each of the general areas for which certification is sought.

Any variation from this sequence leading to certification must be approved by the Dean of the School of Education.

ADMISSION TO TEACHER EDUCATION PROGRAMS

Admission to baccalaureate study at James Madison University does not include admission to an undergraduate teacher preparation program. Students who wish to pursue a course of study leading to the Collegiate Professional Teaching Certificate must meet the requirements for admission and retention in the James Madison University teacher preparation program.

1. Criteria for Evaluating Students in Teacher Education

   a. Students enrolled in teacher education must possess scholarship of a degree and kind which will enable them to guide and stimulate the total development of children and youth.

   To be retained in the teacher education program, a student must adhere to the general scholarship requirements of the University. For admission to Directed Teaching, a student must possess an overall 2.00 point average (C) and a 2.00 average in his/her major and/or minor field.
b. Students enrolled in teacher education must possess good health and be free from physical defects detrimental to effective teaching.

c. Students enrolled in teacher education must be free from speech, hearing, and vision defects which would interfere with classroom awareness and ability to communicate with others.

d. Students enrolled in teacher education must possess behavioral characteristics which will further the social and emotional development of children and youth.

e. Students enrolled in teacher education must exhibit conduct and appearance which are socially and professionally acceptable.

2. Specific Procedures in the Screening Program

a. All freshmen and transfer students who plan to become teachers must complete Form TE-A, which is available in the Office of the Dean of the School of Education, within the first semester of residence. The student description summary of the application for undergraduate admission will also be consulted by the Staff of the Department of Elementary and Early Childhood Education, and/or the Staff of the Department of Secondary Education and School Administration.

b. The instructors of Psyc. 233-234 will complete form TE-B for all students enrolled in this course.

c. The Coordinator of Student Teaching will distribute Forms TE-C and TE-D to all students enrolled in teacher education programs in their junior year. The student will complete Form TE-C and the student’s academic and professional advisors will complete Form TE-D. These forms are returned to the Coordinator of Student Teaching.

d. The evaluation forms used in the student teaching experience will be completed by the Coordinator of Student Teaching and the Supervisory Staff.

3. General Procedures

a. All staff members who are associated with any aspects of teacher education (general, subject and professional), and who identify students who possess traits contrary to those stated in the criteria for retention in teacher education will report such cases to the screening committee.
b. The screening committee composed of the Assistant Dean of the School of Education, the Head of the Department, and the Coordinator of Student Teaching, will meet at least twice a year to review the cases of students who do not appear to meet the criteria for retention in teacher education.

c. In accordance with Virginia Law, all students in teacher education must submit, to the Office of Student Teaching, a current TB immunization certificate signed by a physician stating that the student is free from communicable tuberculosis before they can participate in observation, practice teaching, or other contact activities in the public schools. To be current, the physician's examination must have been performed within the 12 months immediately preceding the beginning of the school session. Certificates may be obtained from the Office of Student Teaching.

Student teaching is required of all students who are enrolled in a program leading to a teaching certificate.

Throughout their entire period of teaching, the students are closely supervised by master teachers who observe their work and instruct them in the methods used. The Coordinator of Student Teaching coordinates the programs, assigns all student teachers to their places, and helps to plan and supervise their work. The University Supervisors have a primary responsibility for supervising the work of the student teachers. Students are given the opportunity to teach in their major area or special field.

Student teachers who live on campus are assigned to the public schools of Harrisonburg, Anthony-Seeger Campus School, and surrounding counties. Many student teachers live off campus and teach in the public schools of various Virginia communities, providing our students with opportunities for a variety of student teaching experiences.

INTER-DEPARTMENTAL PROGRAM

The inter-departmental program offered by the School of Education is designed to prepare the student for endorsement in elementary education and library science. Underlying this program is the assumption that one who works in a school library is more effective if he/she also possesses those skills and understandings appropriate to the classroom teacher in the elementary school.

A student interested in majoring in this program should consult the Head of the Library Science and Educational Media Department and the Head of the Department of Early Childhood and Elementary Education.

Education 263
Four-Year Program (B.S. Degree) Leading to Dual Endorsement in Library Science (K-12) and Elementary Education (4-7)

The student who completes this program may be recommended for the Collegiate Professional Teaching Certificate with endorsements to teach the elementary grades (4-7) or to serve as a school librarian (K-12). (Students wanting the additional endorsement to teach grades K-3 must see the appropriate Department Heads concerning special program arrangements necessary for recent certification changes.)

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<thead>
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<td>Psyc. 233-234</td>
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<td>Hist. 233 or 234</td>
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<td>LSEM. 366</td>
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<td>Educ. 470 (2nd)</td>
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<td>3</td>
<td>Read. 439</td>
<td>3</td>
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<td>LSEM. 354</td>
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</table>

*Includes two different areas selected from the following: biology, chemistry, physics, geology.

**To be taken concurrently with Educ. 480 (Lib. Sci.).

ANTHONY-SEEGER CAMPUS SCHOOL

C. Kenneth Landes, Director

The Anthony-Seeger Campus School, located on the James Madison University campus, opened its doors for the first session in Septem-
The Anthony-Seeger Campus School is an integral part of the School of Education and provides a site for practicum experiences for James Madison University students in the professional education sequence, as well as an experimental center for innovative teaching styles and strategies.

The faculty and staff of the Anthony-Seeger Campus School believe that the learning experiences within the school should be based on the interests and needs of each individual. Maximum development is achieved through learning by doing. The pupils are encouraged to make their own decisions and to use the discovery and inquiry methods to develop an understanding of concepts. Learning is a cooperative effort involving pupils, teachers, and parents, and the faculty and staff work toward instilling a love for learning in each individual.

The program of the Campus School provides various learning experiences for each child’s interests, ability, and style of learning. Reading and mathematics programs are highly individualized and allow for flexibility in overlapping of levels and skills. Special instruction is available in art, music, foreign language and physical education.

THE OFFICE OF STUDENT TEACHING

J. H. Travelstead, Coordinator

The Office of Student Teaching has two major responsibilities: the administration and supervision of directed teaching; and the administration of cooperative programs involving the placement of undergraduate and graduate students in the public schools served by the University.

Student teaching is an integral part of the sequence of professional experiences in all teacher education programs. It is required for those students seeking the Collegiate Professional Certificate.

During the period of directed teaching, the student is supervised in the classroom by an experienced teacher who observes his/her performance and assists him/her in the methods used. The Coordinator of Student Teaching coordinates the programs, assigns all students to their schools, and assists in the planning and supervision of their work. The University faculty supervisors have the major responsibility for supervision and evaluation of students enrolled in Educ. 480.
A student, while engaged in student teaching, is encouraged to live in the community where the school to which he/she is assigned is located.

Students should apply for admission for student teaching by completing an application available in the Office of Student Teaching one semester prior to the semester when student teaching will actually occur. Prior to undertaking student teaching assignments students are expected to have completed all professional education requirements as specified in each program.

A minimum cumulative grade point average of 2.00 in the major and minor fields is required for admission to directed teaching. In addition, the student’s advisor or major professor must complete an evaluation form for any student seeking admission to student teaching.

Listed below are special requirements of the Department of Elementary and Early Childhood Education for majors in that department preparing to student teach:

All students who are admitted to Directed Teaching in Elementary and Early Childhood Education must have: completed Psych. 233, Educ. 360, ElEd. 356, 358, Read. 359, PE. 350, MuEd. 375, Art 310, Sci. 310, and LSEM. 240 with grades of “C” or better; permission of the Department Head and the Director of Student Teaching and an overall grade point average of 2.00. Students who apply for directed teaching in early childhood education (NK-3) must complete Psyc. 369, ECEd. 385 and ECEd. 406 with grades of “C” or better. Students who do directed teaching in elementary education (4-7) must complete EIEd. 369 and Psyc. 234 with grades of “C” or better.

All practicum sites involving either observation or participation experiences are arranged through the Office of Student Teaching. This allows University faculty requests which involve cooperative efforts with public schools to be channeled through one office.

Except for unusual circumstances, the student teaching requirement is for an eight-week block assignment. Any change must be authorized by the Dean of the School of Education.

Student teaching must be experienced for one eight-week block in each general area for which the student is seeking certification.

Listed below are the requirements for admission to student teaching:

1. The student must have been regularly admitted and be in good standing (overall and major grade point of at least 2.0) in the School of Education at the time of application.
2. The student must have completed satisfactorily all prerequisites for student teaching listed for his or her program in the current catalog.

3. The student must have completed a major portion of work in his or her teaching major and minor and be subject for approval for student teaching by an advisor and department head.

4. The student must have completed the application for admission to student teaching (ST Form 1) and any other forms required by the specific department and submitted all forms to the Office of Student Teaching.

5. The student must have submitted a recommendation form (ST Form 2) to a major professor or advisor to be sent to the Office of Student Teaching.

6. The student must have submitted a negative TB examination form (ST Form 3) to the Office of Student Teaching prior to student teaching. Blank forms are available in that office.

CHILD STUDY CENTER

Dr. Hubert R. Vance, Director

The Child Study Center of the School of Education has two major functions: to provide laboratory facilities and clinical practice programs to enable students to develop professional skills in educational assessment, psychotherapy and counseling, the selection of instructional materials, parent interviewing and test interpretation; and to assist children (age 1 month–22 years) directly and indirectly in developing their full physical and mental capabilities.

The Child Study Center is an integral part of the professional program for students in graduate education programs and in a limited number of undergraduate programs. To accomplish the goals of the Child Study Center, an interdisciplinary professional team of faculty from respective departments of the School of Education is utilized. These include faculty from Psychology, Special Education, Speech Pathology and Audiology, Elementary Education and from other departments as specific competencies are required.

The Child Study Center gives priority to children and young adults who are referred by the Speech and Hearing Center, the Reading Clinic, and by local school districts and social service agencies.
DEPARTMENT OF
ELEMENTARY AND
EARLY CHILDHOOD
EDUCATION

Dr. Charles W. Blair, Head of the Department

Professors Blair, Darrin, Kaslow, Laffey, C. Neatour; Associate Professors L. Graham and Merlin; Assistant Professors Bender, Davis, M. Dickerson, Hopkins, Leonard, Muia, and Shaffer; Lecturer Coyle.

The Department of Elementary and Early Childhood Education offers programs designed to provide the student with a strong background in professional education and to qualify the student for the Collegiate Professional Teaching Certificate in the State of Virginia. Two major programs are offered by the department.

MAJOR PROGRAMS

Four-Year (B.S. Degree) Program for a Major in Elementary Education (Grades 4-7)

The student who majors in Elementary Education may be recommended for the Collegiate Professional Certificate with endorsement for grades four through seven.

Students majoring in elementary education who plan to teach in departmentalized elementary schools should use electives to acquire added proficiency in one or more academic areas. Students who plan to teach in self-contained classrooms should utilize available electives to develop increased professional or academic proficiency and to expand individual interests.

Students who desire to be recommended for endorsement in Library Science in addition to Elementary Education should contact the Head of the Library Science and Educational Media Department.

All students who major in elementary education, regardless of additional endorsements, are assigned an advisor in the Elementary and Early Childhood Education Department.

Students who are contemplating graduate study in some aspect of professional education should consult with the advisor concerning prerequisites for admission to graduate programs.
### Four-Year Program (B.S. Degree) for a Major in Early Childhood Education (N, K-3)

Students who complete this major program may be recommended for the Collegiate Professional Certificate with endorsement to teach in nursery school through grade three.

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
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<td>Comm. 200, 222 or 226</td>
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<td>Fine Arts</td>
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<td>*Natural Science</td>
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<td>Humanities</td>
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<td>Physical Education</td>
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#### Sophomore Year

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#### Junior Year

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<td>Read. 359</td>
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<td>Educ. 360</td>
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<td>MuEd. 375</td>
<td>3</td>
</tr>
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<td>Sci. 310</td>
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#### Senior Year

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<tr>
<td>Hist. 233 or 234</td>
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<tr>
<td>Elective in Soc. Sci.</td>
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<td>Electives</td>
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*Include two different areas selected from the following: biology, chemistry, physics, geology.*
Students who have interest in positions in either nursery schools or comprehensive child development programs and who desire additional preparation for such assignments should enroll in the following courses after consultation with the Coordinator of the Early Childhood Education Program.

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<th>Junior Year</th>
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<tr>
<td>EIEd. 356</td>
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<td>EIEd. 358</td>
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<td>Educ. 360</td>
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<td>Sci. 310</td>
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**Description of Courses**

**Early Childhood**

ECED. 385. *Laboratory in Child Study* (2, 2), 3 credits.

Deals with collecting, recording, and analyzing data about children and its application. Students observe and participate in Early Childhood Education Programs. *Prerequisite: Psyc. 369 or equivalent.*


Considers current problems and issues in early childhood education as these problems and issues relate to the professional education of pre-service teachers.

ECED. 406. *Teaching the Young Child*, 6 credits.

An integrated methods course for guiding the development and learning of children at the nursery school, kindergarten and primary levels. *Prerequisite: Psyc. 369.*


Designed to give capable students an opportunity to do independent research on educational problems under faculty guidance. The plan for the study must be presented to the Head of the Department for approval.

ECED. 499. *Honors in Early Childhood Education*, 3 credits.

ECED. 509. *Curriculum for Early Childhood Education*, 3 credits.

Theory and practice in the design and implementation of appropriate curriculum activities for kindergarten and nursery school children. Development through play is emphasized and the areas of science, social studies, and mathematics are considered. *Prerequisite: ECEd. 508 or ECEd. 385 or equivalent.*

270  *Elementary and Early Childhood Education*
ECED. 510. The Creative Arts for Early Childhood Education, 3 credits.
Application of knowledge and theory of creativity to educational programs for young children. Learning activities in the areas of art, music, creative use of literature and development of creative language, movement and dance will be considered. Prerequisite: ECEd. 508 or ECEd. 385 or equivalent.

ECED. 541. Working with Parents of Young Children, 3 credits.
Teacher's role in parent and family life education is explored. Methods by which parent-teacher cooperation and coordination is achieved and explored. Current research in parent education is reviewed and the selection and evaluation of materials for use with parents are considered. Prerequisites: Psyc. 369, ECEd. 385 or equivalent.

ECED. 542. Comprehensive Child Development Centers, 3 credits.
Study of programs in comprehensive child development centers and nursery schools. Emphasis on meeting the needs of young children in groups. Consideration of facilities, equipment and materials, program development, staff training and community resources. Prerequisite: Written Recommendation of the Early Childhood Education Program Coordinator.

ECED. 585. Administration and Supervision in Early Childhood Education, 3 credits.
The role of the administrator in facility planning, budgeting, staff development and personnel supervision in programs for young children. Prerequisite: Permission of the instructor.

(Other five hundred level courses are listed in the Graduate Bulletin.)

Elementary Education

ELED. 101. Orientation to the Profession, 1 credit.
Designed to provide occupational and educational information about careers in elementary and early childhood education. Observation opportunities are provided.

ELED. 356. Language Arts in the Elementary School, 3 credits.
Provides the undergraduate student with an understanding of the related factors which influence the total language development of the child. Specific attention is given to the teaching of spelling, handwriting, and other communication skills. The differentiation of instruction in terms of learning ability is considered. Prerequisite: Psyc. 233.

ELED. 357. Social Studies in the Elementary School, 3 credits.
Study of teaching methods and materials which relate to social studies instruction in the elementary school. The objectives of social studies instruction are studied in relationship to the developmental needs of children.

ELED. 358. Mathematics in the Elementary School, 3 credits.
Consideration of the use of manipulative, visual, and symbolic materials to give meaning to the number system, and to help the child gain an understanding of number operations with whole numbers, fractions and decimals. The prospective teacher will consider what the pupils must learn, what the order of their learning should be, and how they can be assisted. Prerequisite: Psyc. 233 or equivalent.

For those students preparing to teach in the elementary school, grades 4-7. An integrated methods course designed to meet the developmental needs of children in the
various subject fields included in the elementary school curriculum. Prerequisite: Educ. 360 or equivalent.

ELED. 390. Practicum in Elementary Education (1, 4), 3 credits.
Provides practical classroom experience for pre-service elementary teachers. Under the supervision of an in-service teacher students engage in a variety of classroom activities commensurate with their professional preparation. Prerequisite: Permission of instructor.

ELED. 401. Problems in Elementary Education, 1-3 credits.
Considers current problems and issues in elementary education as these problems and issues relate to the professional education of teachers. Prerequisite: Permission from the Head of the Department.

ELED. 490. Special Studies in Elementary Education, 1-3 credits.
Designed to give capable students an opportunity to engage in the independent study of educational problems under faculty guidance. The plan for the study must be approved by the faculty advisor and the Department Head.

ELED. 499. Honors in Elementary Education.

ELED. 531. Diagnosis and Remediation in Mathematics, 3 credits.
Develops competency in the diagnosis and remediation of pupil learning difficulties in mathematics. Prerequisites: EIEd. 358 or EIEd. 530 or equivalent.

(Other five hundred level courses are listed in the Graduate Bulletin.)

Reading Education

READ. 359. Reading in the Elementary School, 3 credits.
A survey of the teaching of reading in the elementary school. Attention is given to readiness, elementary reading skills, and individualizing instruction for different types of learners. Prerequisite: Psyc. 233 or equivalent.

READ. 401. Problems in Reading Education, 1-3 credits.
Deals with current problems and issues in reading education as these problems and issues relate to the professional education of preservice teachers. Prerequisite: Permission from the Head of the Elementary and Early Childhood Education Department.

READ. 439. Diagnostic Reading (2, 2), 3 credits.
A study of diagnosing and correcting reading problems in the classroom. Each student is required to employ methods and techniques in laboratory situations as arranged by the course instructor. Prerequisite: Read. 359.

READ. 450. Reading in the Secondary School, 3 credits.
Developing fundamental and special reading skills, evaluation of reading achievement, organizing the class for individual differences and teaching reading in the content areas.

READ. 490. Special Studies in Reading Education, 1-3 credits.
Designed to give capable students an opportunity to engage in the independent study of educational problems under faculty guidance. The plan for the study must be approved by the faculty advisor and the Department Head.

(Five hundred level courses are listed in the Graduate Bulletin.)

272 Elementary and Early Childhood Education
The Department of Library Science and Educational Media offers a program designed to prepare professional media personnel. The Department also offers courses for other prospective professional educators to effectively utilize and produce all forms of media in a unified media approach.

To receive "School Librarian" endorsement a person must also be certified to teach in a subject field. Regardless of the subject area or grade level chosen for certification, students completing the School Library Media Services requirement may be recommended for endorsement for "school librarian" in grades K-12. Students interested in dual certification in School Library Media Services and Elementary Education should refer to the description of that program. See page 264.

The Department’s offerings include a core of basic courses that will prepare students for graduate study in School Library Media Services.

MAJOR PROGRAM AND CERTIFICATION

The minimum requirement for a major in School Library Media Services and endorsement as a "School Librarian" is 26 semester hours from the department to include LSEM 240, 340, 354, 365, 366, 375 or 370, 486 and Educ. 480 (six semester hours in Directed Teaching-School Library Media Services and eight semester hours in Directed Teaching-in a subject area).

Students interested in a program in School Library Media Services should consult the Head of the Department.

SUGGESTED SEQUENCE OF COURSES

Students majoring in School Library Media Services will study toward either the Bachelor of Arts or Bachelor of Science degree.

To fulfill all requirements, the following sequence of courses in this department is recommended for students majoring in School Library Media Services:
### Description of Courses

#### Library Science

**LSEM. 101. Resources for College Studies,** 2 credits.
- Designed to acquaint students with college library resources and to offer guided experiences in their use in the research process.

**LSEM. 220. Social Foundations of Librarianship,** 3 credits.
- Considers the history, philosophy, and objectives of the library as an organization, and describes the range of current library functions and services. Focuses on the role of the library as a fundamental cultural institution of society and considers the implications of technology for the future.

**LSEM. 240. Children’s Literature,** 3 credits.
- Prospective teachers and librarians gain familiarity with the varying types of literature for children. Principles of evaluation for quality and selection to meet the developmental needs and interests of individual children, with consideration of curriculum-related materials and means of arousing interest in books. Prerequisites: Eng. 101-102.

**LSEM. 340. Information Sources,** 3 credits.
- Use of reference materials to meet the information needs of students. Includes the study of encyclopedias, dictionaries, yearbooks, indexes, bibliographies, and specialized reference books for the various subject areas.

**LSEM. 354. Young People’s Literature,** 3 credits.
- Introduces prospective teachers and librarians to the current literature written for or appealing to young people. Considers principles and problems in the selection of reading materials for today’s adolescent.

**LSEM. 365. Organization of Materials,** 3 credits.
- Practice for supervision of the clerical aspects of library management, including circulation systems and technical processing of materials. Procedures of acquisition, simplified cataloging, and classification of library materials.

**LSEM. 366. Administration of School Libraries,** 3 credits.
- The functions of the school library as a media center, standards for development, involvement in design of physical facilities, budget planning, supervising of personnel, and evaluation of on-going programs. Prerequisite: LSEM. 365.

**LSEM. 370. Audio-Visual Materials,** 3 credits.
- Principles and procedures in selection and evaluation of audio-visual materials, production of simple materials, techniques for using these teaching materials in the class-
room, laboratory experience in the operation of equipment, and previewing materials available for use in the public schools.

LSEM. 375. Selected Topics in Media, 1-2 credits.
An in-depth study of a narrowly defined topic or practice in media. May be repeated when course content changes. See schedule of classes for current topic.

LSEM. 482. Seminar in School Library Media Services, 2 credits.
Provides preservice school library media professionals with an opportunity to interact concerning their supervised internship. Focuses on the library media professional's responsibility to manage, teach, produce and design materials, guide students and work with faculty, and plan for curriculum in the school library media center. Also readings in current trends. Prerequisite: Must be taken concurrently with Educ. 480.

LSEM. 486. Senior Seminar in Library Service for Schools, 1-3 credits.
Focuses on the school librarian's services in the teaching of library research methods, and as resource person for educators in the planning for instruction and curriculum. In addition, students will undertake activities to demonstrate their competence in various aspects of school librarianship, and will read about and discuss current activities and new developments in the library profession. Prerequisites: Senior standing and fifteen semester hours in Library Science.

LSEM. 487. The Use of Television in Education, 3 credits.
Designed to familiarize and prepare prospective teachers with education television and video presentations as a medium for classroom instruction. Included will be a study of the role of the television teacher, the problems involved in the production and receiving of programs, evaluation techniques, and procedures for relating the television lesson to the total curriculum. (Formerly Educ. 487.)

LSEM. 488. Evaluation of Educational Media, 3 credits.
Analysis and evaluation of programmed instruction, teaching machines and other media. Criterion for evaluating these instructional vehicles will be studied. (Formerly Educ. 488.)

LSEM. 490. Special Studies in School Librarianship, 1-3 credits each semester.
Independent study of a specific topic in school librarianship. Offered only with consent of the Head of the Department.

LSEM. 501. Workshops in Library Science, 1-3 credits.
Concentrated workshops designed for the continuing professional development of school personnel for more effective provision and utilization of school library services and resources. Each workshop will deal with a topic of current concern, with emphasis on practical methods and projects. Prerequisite: Collegiate Professional Certificate or permission of Head of Department.

LSEM. 505. Seminar in Media for Teachers, 3 credits.
A seminar, designed specifically for teachers, which involves both the application of recently tested innovative ideas together with the intensive study of media principles, theories and practices. Topics will change from semester to semester and range from visual literacy to the development and use of learning stations in the classroom.

LSEM. 510. Collection Development, 3 credits.
Principles and procedures for developing multi-media library collections. Study of reviewing media and bibliographies for print and non-print materials. Developing stand-
ards of judgment for selection of materials of quality for depth within subject areas and for breadth of coverage. Prerequisite: Collegiate Professional Certificate or permission of Head of Department.

LSEM. 511. Survey of Books for Children, 3 credits.
Comprehensive survey of the reading materials available for children, including current writings and also the older works which have maintained their value and popularity. Study of the research on children’s reading interests.

LSEM. 512. Survey of Books for Adolescents, 3 credits.
Comprehensive survey of reading materials for secondary school students. Attention to curriculum-related non-fiction, biography, literary works, and magazines. Study of the research on reading interests.

LSEM. 520. Literary Enrichment Activities, 3 credits.
Activities for teachers and librarians for developing the enjoyment of books in elementary and secondary students. Experience in such skills as storytelling, book talks, broadcast programs, creative dramatics and puppetry, and the preparation of annotated book lists. Prerequisite: Collegiate Professional Certificate or permission of Head of Department.

LSEM. 525. Literature in the Oral Tradition, 3 credits.
Storytelling studied as a traditional folk art, as a teaching technique, as an art form based on improvisation, and as a medium for transmitting values, ideas, and ideals. Experience in selecting and adapting, for oral presentation, literary materials primarily from the realm of folklore.

LSEM. 530. Special Problems in Cataloging, 3 credits.
Instruction and experience in the methods of handling the special problems that arise in the cataloging of some of the printed and non-printed materials in the multi-media library. The course assumes that the student already has a basic knowledge of library cataloging and classification by the Dewey Decimal system. Prerequisites: LSEM. 365 or equivalent, and permission of Head of the Department.

LSEM. 540. Audio-Visual Instruction, 3 credits.
Examines principles underlying effective use of audio-visual equipment and materials in the teaching-learning process. Students will become familiar with both established and innovative audio-visual materials. The student will produce audio-visual teaching aids appropriate to his/her own instructional area.

LSEM. 542. Production of Instructional Materials, 3 credits.
Develops skills in the production of a variety of projected and non-projected audio-visual materials for classroom use.

LSEM. 550. Touring Instructional Media, 3 credits.
A summer tour of instructional/school media centers in different geographical locations of the United States. The tour will emphasize current trends in instructional media, physical plant facilities, and administrative structure of services.

LSEM. 580. Internship in School Library Service, 3 credits.
The internship provides the advanced but inexperienced graduate student with supervised on-the-job training. Cannot be applied to degree requirements. Prerequisite: Must have teaching experience and have completed library science courses required for certification.

276 Library Science and Educational Media
The Department of Physical and Health Education is organized to contribute to the general education of all students and to prepare students for professional careers in physical education and health sciences.

Students interested in programs offered by the Department of Physical and Health Education should consult Dr. Marilyn Crawford, Godwin Hall.

MAJOR PROGRAMS

Physical Education

A student who wishes to major in physical education may select a non-teaching or a teaching program. Students enrolled in both programs will need to take 30 hours of specified courses in physical education and 3 hours of prerequisites, in addition to the courses for General Studies and degree requirements.

In a non-teaching program, a concentration of 18 hours is required in either arts and aesthetics, or journalism and photography, or radio and television, or sports management. Students should see an academic advisor in physical education for details.

Students who wish to teach may pursue certification for the elementary or secondary level, or both. Additional hours are required in health and physical education, and a minor is required in education. In addition to the General Studies and academic major requirements, students desiring teaching certification should consult the Teacher Certification Requirements Manual. This manual is available in each academic department and in the School of Education. Students should see an academic advisor in physical education for details.
Health Science

Four programs are available to the person who wishes to major in health science: (1) the basic health science program, (2) community health education, (3) school health education and (4) environmental health. Students enrolled in all programs will need to take 39 hours in the basic health science major, in addition to the courses for General Studies and degree requirements.

In the community health education program an additional 20 hours are required in specified interdepartmental courses. Students should see an academic advisor in health education for details.

The school health education program leads to teacher certification in health education. An additional 27 hours are required in health and education. Students should see an academic advisor in health education for details.

In the environmental health program an additional 27 hours are required in specific interdepartmental courses. Students should see an academic advisor in health education for details.

MINOR PROGRAMS

The following minor programs are available to all students and may be combined with any teaching or non-teaching major in the University.

Aquatics

The aquatics minor consists of 24 hours, including PE. 264 (Lifesaving ARC/YMCA), PE. 365 (Lifeguard Training), PE. 366 (Aquatic Instructor Training YMCA), PE. 367 (Aquatic Leadership Training), PE. 368 (Organization and Administration of Aquatic Programs), Hth. 204 (Emergency Health Care); six semester hours to be selected from aquatic laboratory courses and six semester hours to be selected from aquatic theory courses, with the approval of the minor advisor.

Dance

The dance minor consists of 26 hours, including PE. 255 (Survey of the Folk Forms of Dance) or PE. 256 (Survey of the Elements of Modern Dance), PE. 346 (Dance Production) PE. 349 (History of Dance); six semester hours from Modern Dance Technique (PE. 140 A, B; 240 A, B; 340 A, B; 245); six semester hours from Folk Forms Technique (PE. 141, 241, 143, 243, 244, 347); and six additional hours to be selected from dance courses with the approval of the minor advisor.
Coaching

The coaching minor consists of 26 hours, including Bio. 270 (Human Physiology), Bio. 290 (Human Anatomy), PE. 383 (Mechanical Analysis of Movement), PE. 385 (Psychology of Motor Performance), PE. 484 (Problems in Administration), Hth. 205 (Prevention and Care of Athletic Injuries), and 8 additional hours to be selected from the Techniques of Sports classes, with the approval of the minor advisor.

Athletic Training

The athletic training minor consists of 25 hours, including Bio. 270 (Human Physiology), Bio. 290 (Human Anatomy), Hth. 204 (Emergency Health Care), Hth. 205 (Prevention and Care of Athletic Injuries), Hth. 303 (Sports Medicine), Hth. 305 (Therapeutic Exercises), HE. 280 (Nutrition for Today), PE. 383 (Mechanical Analysis of Movement), and PE. 384 (Physiology of Muscular Activity). Students seeking certification by the National Athletic Trainer’s Association should be in a teacher education curriculum and should consult with an academic advisor in physical education for details.

SPECIAL PROGRAMS

Driver Education

Six semester hours are required to qualify for endorsement to teach driver education in the public schools of Virginia. Students who seek endorsement should successfully complete two of the following courses: Hth. 223 (Elements of Injury Control), Hth. 330 (Traffic and Driver Safety), and Hth. 430 (Laboratory Methods and Educational Media in Traffic and Driver Safety). In order to instruct Motorcycle Safety in the State of Virginia, a student must complete Hth. 339 or a State-approved workshop.

Equitation

An Equitation Instructor Training Program is available to Madison College students. Consult Dr. Marilyn Crawford, Godwin Hall.

MAJOR IN PHYSICAL EDUCATION (NON-TEACHING: Arts and Aesthetics, Journalism and Photography, Radio and Television, Sports Management)

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<th>Sophomore Year</th>
<th>Credit Hours</th>
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<td>Eng. 101-102</td>
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<td>Comm. 200, 222 or 226</td>
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### MAJOR IN PHYSICAL EDUCATION (TEACHING: N-7)

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280  Physical and Health Education
MAJOR IN PHYSICAL EDUCATION (TEACHING: 7-12)

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MAJOR IN HEALTH SCIENCE (SCHOOL HEALTH)
(B.S. Degree)

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### MAJOR IN HEALTH SCIENCE (COMMUNITY HEALTH)  
(B.S. Degree)

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(B.S. Degree)

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282 Physical and Health Education
### Freshman Year

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## MAJOR IN HEALTH SCIENCE (BASIC PROGRAM)
(B.S. Degree)

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**Physical and Health Education** 283
Description of Courses

Physical Education*

PE. 105-106. *Physical Education Adapted Activities* (0, 4), 2 credits each semester.

Designed for students with severe medical restrictions and is adapted to individual needs. Prerequisites: Recommendation of University Physician and permission of the Head of the Department.

**PE. 120-138. Elementary Sports (0, 4), 2 credits.**

Elementary level in specific individual sports: 122—Cycling; 123—Personal Defense; 125—Tennis; 126—Golf; 127—Archery; 128—Fencing; 129—Badminton; 131—Skiing; 133—Bowling; 134—Equitation; 136—Handball; 137—Squash; 138—Racquetball.

PE. 140-148. *Elementary Dance and Conditioning Activities* (0, 4), 2 credits each.

Elementary level in specific types of dance and conditioning activities; 140A, B—Modern; 141—Square and Round; 142—Ballet; 143—Folk and Social; 145—Conditioning Activities for Women; 146—Conditioning Activities for Men; 148—Jogging.

PE. 147. *Repertory-Performance (0,4), 2 credits.*

Analysis and performance of choreographed works. Prerequisite: Dance experience and approval of the instructor.

PE. 149. *Elementary Rhythmic Gymnastics* (0, 4), 2 credits.

The latest form of group gymnastics based on rhythms; swing movements using a variety of hand apparatus and music.

PE. 150. *Campcrafter (0, 4), 2 credits.*

Designed to help improve knowledges, skills, conservation and safety practices for enjoyment in and out-of-doors.

PE. 151. *Backpacking (0, 4), 2 credits.*

Designed to give realistic experiences to students in the field of moving, extended adventure type camping.

PE. 152. (MISC. 102) *Introduction to Orienteering (0, 4), 2 credits.*

Introduces the student to the sport of orienteering. Provides an opportunity to gain an understanding of map and compass use, and enhances the student’s enjoyment of the out-of-doors.

PE. 154. *Elementary Gymnastics* (0, 4), 2 credits.

Designed for persons with no previous gymnastics experience who would like to learn the fundamentals. Emphasis will be given to the development of basic management skills as they relate to mat work, apparatus and trampoline.

*All classes are open to men and women.

**This course may include a second activity according to the season: both activities must be completed successfully in order to pass the course. Fees will be charged as follows for a semester class: bowling (tenpins) $25.00; riding, $240.00. The University reserves the right to cancel any class should suitable facilities be unavailable and to alter prices in the event of unusual inflation. Students must furnish their own transportation to bowling, golf and equitation classes.
PE. 160. Elementary Swimming (0, 4), 2 credits.
Elementary levels of swimming strokes, personal safety, rescue and drownproofing skills. A course for the individual without swimming skills as well as the person who can swim not more than twenty-five yards.

PE. 165. Elementary Canoeing (0, 4), 2 credits.
Elementary skills, theory and strategies in canoeing and boating safety.

**PE. 225-234. Intermediate Sports (0, 4), 2 credits.
Intermediate level in specific individual and team sports: 225—Tennis; 226—Golf; 227—Archery; 228—Fencing; 229—Badminton; 233—Bowling (Prerequisite: average 110); 234—Equitation.

PE. 240-243. Intermediate Dance (0, 4), 2 credits.
Intermediate level in specific types of dance: 240A, B—Modern; 241—Square and Round; 242—Ballet; 243—Folk; 244—Social. Prerequisite: Elementary level or equivalent of the respective dance forms.

PE. 245. Dance Improvisation (0, 4), 2 credits.
Development of individual, group and environmental awareness, extending individual movement vocabulary and theory, and exploration of the interrelationships of the visual and theatre arts through structured improvisation. Prerequisite: PE. 140 or permission of the instructor.

PE. 247. Repertory—Choreography (0, 4), 2 credits.
Study of dance choreography, and the choreographing and directing of an original work. Prerequisite: Dance experience and approval of the instructor.

PE. 248. Repertory—Notation (0, 4), 2 credits.
The study and use of various systems of notating movement. Prerequisite: Dance experience and approval of the instructor.

PE. 250. Advanced Camperafer (0, 4), 2 credits.
Designed to improve knowledge in more advanced outdoor skills, understand conservation and safety practices. Prerequisite: PE. 150 or permission of the instructor.

PE. 251. Mountaineering (0, 4), 2 credits.
Designed to help students acquire an alert mind and a strong body capable of meeting the vigorous physical demands of the tasks involved in mountaineering with some degree of safety, comfort, and enjoyment. Prerequisite: PE. 151 or permission of the instructor.

PE. 254. Intermediate Gymnastics (0, 4), 2 credits.
Intermediate level performance using floor and hand apparatus.

**This course may include a second activity according to the season: both activities must be completed successfully in order to pass the course. Fees will be charged as follows for a semester class: bowling (tenpins) $25.00; riding, $240.00. The University reserves the right to cancel any class should suitable facilities be unavailable and to alter prices in the event of unusual inflation. Students must furnish their own transportation to bowling, golf and equitation classes.

Physical and Health Education 285
PE. 255. Survey of the Folk Forms of Dance (0, 4), 2 credits.
Survey of the folk forms of dance with emphasis on traditional dance steps and figures, calling and prompting techniques, reconstruction of dances from written instructions and analysis of form. (Not acceptable for General Studies requirement.)

PE. 256. Survey of the Elements of Modern Dance (0, 4), 2 credits.
A survey of the approaches to dance technique, improvisation, and choreography essential to the teaching of the theatre forms of dance commonly included in the high school physical education curriculum. (Not acceptable for General Studies requirement.)

PE. 260. Intermediate Swimming (0, 4), 2 credits.
Skill perfection in five different strokes, drownproofing and prelifesaving skills.

PE. 261. Beginning Springboard Diving (0, 4), 2 credits.
Basic and optional dives from the low board—forward, backward, inward, reverse and twist, plus five optional dives—one from each category.

PE. 263. Aquatic Sports (0, 4), 2 credits.
Swimming strokes, diving, water stunts, synchronized swimming, games, skin diving and other water recreational activities. Prerequisite: PE. 260 or permission of the instructor. (Formerly PE. 363.)

PE. 264. Lifesaving—ARC/YMCA (0, 4), 2 credits.
Two nationally recognized lifesaving programs—ARC and YMCA. Successful completion of the course may lead to certification in both programs. Prerequisite: PE. 260 or 267 or approval of the instructor. (Not acceptable for General Studies requirement.)

PE. 266. Advanced Swimming (0, 4), 2 credits.
Covers ten swimming strokes with emphasis on accuracy, endurance, swimming, breath control and body control skills, lifesaving prerequisites and advanced “drownproofing” techniques. Prerequisite: PE. 260 or approval of the instructor.

PE. 268. Synchronized Swimming (0, 4), 2 credits.
All forms of synchronized swimming and stunts, including participation, choreography, and performance. Prerequisite: Advanced swimming skill and approval of the instructor.

PE. 270-273. Techniques of Activities (0, 4), 2 credits.
Fundamental and advanced skills, strategy, rules and officiating techniques; 270—Volleyball-Softball; 271—Tumbling-Apparatus; 272—Gymnastics-Track and Field; 273—Soccer. (Not acceptable for General Studies requirement.)

PE. 283. Basic Skills and Fundamentals of Movement (0, 2), 1 credit.
Stresses skills of movement and body mechanics. (Recommended for majors in elementary education. Not acceptable for General Studies requirement.)

PE. 301. New Directions in Physical Education, 1-3 credits.
In-depth exploration of topics significant in physical education. The topic for each semester will be announced.

PE. 315. Advanced Tennis (0, 4), 2 credits.
Fundamental and advanced skills and strategy for singles, doubles and mixed doubles play.

286 Physical and Health Education
PE. 316. Advanced Golf (0, 4), 2 credits.
Advanced level of skill with emphasis on situational shots, strategy in match and medal play and analysis of problems. Prerequisites: PE. 226 or the equivalent and provide own golf clubs.

PE. 340. A,B. Advanced Modern Dance (0,4), 2 credits.
Modern dance technique, improvisation, and composition on an advanced level. Prerequisite: PE. 240 or equivalent.

PE. 343. Repertory—Reconstruction (0, 4), 2 credits.
Performance and direction of existing works from notated or other documented sources. Prerequisites: Dance experience and approval of the instructor.

PE. 344. Repertory—Direction (0, 4), 2 credits.
Direction of dancers in rehearsal and performance. Prerequisites: PE. 147, 247.

PE. 346. Dance Production (2, 2), 3 credits.
An introduction to the study of the technical aspects of dance production with emphasis on practical experience in sound, lighting, costuming, staging, and make-up. No prior experience needed.

PE. 347. Recreational Dance Leadership (1, 2), 2 credits.
The teaching of the folk and social forms of dance in recreational, instructional, and exhibition situations. Skills in calling, prompting, demonstrating, reconstructing, researching, analyzing, and staging dances. Prerequisites: PE. 255 or 143 and 141 or permission of the instructor.

PE. 349. History of Dance, 3 credits.
A survey of dance history from primitive times through the twentieth century. Emphasis on Western Civilization.

PE. 350. Physical Education for Children, 2 credits.
A survey of the activity needs of children and the selection, organization, presentation and evaluation of activities appropriate in meeting these needs. Prerequisites: Psyc. 233-234 or equivalent. (Formerly PE. 370.)

PE. 351. Movement Education in the Elementary School (2, 2), 3 credits.
Theory and content of movement learning experiences as the core of the elementary school physical education program. (Formerly PE. 382.)

PE. 352. Activities for Children (1, 2), 2 credits.
Rhythms, games, self-testing and all other types of activities taught to children. (Not acceptable for General Studies requirement.)

PE. 353. Practicum in Activities for Children (1, 2), 2 credits.
Supervised experiences in observation and participation in physical education programs in games, rhythm, self-testing and all other types of activities taught to children. Prerequisite: PE. 351. Credit may not be received for both PE. 352 and PE. 353. (Not acceptable for General Studies requirement.)

PE. 355. Dance in the Elementary School (1, 3), 2 credits.
The movement and rhythmic components of dance and appropriate dances stressing interrelationships with art, music, drama and developmental activities from other curricular areas. Prerequisite: PE. 351. (Formerly PE. 345.)

Physical and Health Education  287
PE. 357. Physical Education for the Handicapped (1, 2), 2 credits.

Designed to provide understanding and laboratory experience in developing exercises and physical activity programs for handicapped children and youth. Prerequisites: SpEd. 340, SpEd. 360, and SpEd. 370. (Formerly PE. 387.)

PE. 362. Advanced Springboard Diving (0, 4), 2 credits.

A minimum of ten dives from the three meter board. Prerequisite: PE. 261 or the equivalent.

PE. 365. Lifeguard Training (0, 2), 1 credit.

A lifeguard training and certification program for those students holding current Senior Lifesaving Certificates. Major emphasis will be placed on basic and pool lifeguarding procedures. Also covered will be lifeguarding in lakes, rivers, and surf. Certification as YMCA Lifeguard—Basic and Pool. Prerequisites: PE. 264 and Hth. 204. (Not acceptable for General Studies requirement.)

PE. 366. Aquatic Instructor Training—YMCA (1, 2), 2 credits.

Students successfully completing this course may be certified as YMCA Specialist Instructor of Swimming and/or Specialist Instructor of Lifesaving. Prerequisite: PE. 264. (Not acceptable for the General Studies program.)

PE. 367. Aquatic Leadership Training, 3 credits.

Methods used in teaching aquatics—swimming, diving, aquatic sports of all types for all age groups. Also presented will be aquatic terminology, progression of skills, ability to analyze and prescribe, evaluation, evaluation research materials. Prerequisites: PE. 260 or PE. 267 and PE. 264, or PE. 366.

PE. 368. Organization and Administration of Aquatic Programs in Schools, Communities and Camps, 3 credits.

Designed to completely familiarize the student with the existing major aquatic programs in schools, “Y’s,” community, national and international organizations. Planning aquatic programs, financing, publicizing, motivating attendance and legal relations as pertains to school and community programs. Prerequisites: PE. 260 or PE. 267, and PE. 264 and PE. 366.

PE. 371-376. Techniques of Activities (0, 4), 2 credits.

Fundamental and advanced skills, strategy, rules and officiating techniques: 371—Hockey; 372—Football; 373—Basketball; 374—Badminton-Archery; 375—Tennis; 376—Field Sports. (Not acceptable for General Studies requirement.)

PE. 378. Laboratory Experiences in Physical Education (0, 3), 1 credit.

Supervised experiences in observation and participation in physical education programs in classes, clinics, and public school programs. Prerequisite: Junior classification.

PE. 380. Officiating, 1 credit.

Theory and practice of officiating in selected sports. The standards of the appropriate men’s and women’s officiating groups are used. PE. 380: A-Basketball; B-Football; C-Field Hockey; D-Swimming and Diving; E-Soccer; F-Track and Field; G-Gymnastics; H-Baseball; I-Softball; J-Volleyball; K-Fencing.

PE. 383. Mechanical Analysis of Movement (2, 2), 3 credits.

The science of human movement involving principles of bio-mechanics, and physiology; the application of the knowledge of anatomy in improving motor performance. Prerequisites: Bio. 270 and Bio. 290.
PE. 384. Physiology of Muscular Activity (2, 2), 3 credits.
Study of the effects of exercise upon the body and bodily functions; physiological effects of special kinds of activity; physiology of training; assessment of organic fitness. Prerequisites: Bio. 270 and Bio. 290.

PE. 385. Psychology of Motor Performance, 3 credits.
A study of psychological factors as they relate to learning and performing sport and dance skills; an introduction to principles of motor learning is included.

PE. 386. Meaning and Values of Movement, 3 credits.
The history and philosophy of physical education as it has affected the schools of the United States. The principles of health and physical education as a basis for objectives, program and method; current problems and issues.

PE. 450. Organization and Administration of Elementary School Physical Education, 3 credits.
Directed toward an understanding of problems specific to elementary schools with respect to personnel, facilities, equipment, budget, rescheduling evaluation and public relations. Prerequisite: PE. 351. (Formerly PE. 482.)

PE. 460. Field Work in Aquatics, 3 credits.
"In-the-field" practical teaching by maintaining residency for at least an eight-week period at a YMCA/YWCA camp, B.S.A. camp, town or community recreation department, A.R.C. chapter, school or college recreation program. The student must submit in writing the area he or she plans to complete in the summer field work and it must be approved by the instructor prior to enrolling in the course. Prerequisites: PE. 367 and PE. 368.

PE. 464. Techniques in Competitive Swimming, Diving and Water Polo, 3 credits.
A systematic treatment of the philosophy, principles and techniques of teaching and coaching swimming, diving and water polo.

Designed to familiarize the student with all the aspects relating to design, construction, operation and maintenance of swimming pools. Consideration is given to state health and pool codes, as pertains to pool construction and design.

PE. 470-478. Techniques of Activities (0, 4), 2 credits.
Fundamental and advanced skills, strategy, rules and officiating techniques: 470—Conditioning; 471—Lacrosse, 474—Wrestling; 476—Golf; 478—Fencing. (Not acceptable for General Studies requirement.)

PE. 484. Problems in Administration, 3 credits.
Selected problems relating to the program of health education, physical education, intramurals, and interscholastic athletics; attention is also given to scheduling, facilities, equipment, budgeting, public relations, and professional standards and ethics. Prerequisite: PE. 386 or equivalent.

The selection, administration and use of tests unique to the field of physical education. Special emphasis is placed on testing procedures.

Physical and Health Education 289
PE. 486. Adapted Physical Education (3, 1), 3 credits.
Principles and procedures for adapting physical education programs for students with physical and mental disabilities. Laboratory experience included. Prerequisite: PE. 383.

PE. 490. Special Studies in Physical Education, 1-3 credits each semester.
Designed to give superior students in physical education an opportunity to do independent study and/or research under faculty supervision. Prerequisite: Permission of the Head of the Department.

PE./PSYC./SOCI. 496. Psychological and Sociological Aspects of Sport, 3 credits.
A study of the psychological and sociological implications of sport and the effect of sport on United States and other cultures.

PE. 501. Workshop in Physical Education, 1-3 credits.
An intensive study of one aspect of physical education that is of current concern to physical educators in the field.

PE. 506. A.B. Direction and Performance of Dance Repertoire, 3 credits.
Experiences in the direction and technical training of dance companies, ensembles, and repertory groups, and in the performance of dance roles choreographed by dance faculty, artists-in-residence, or advanced students.

PE. 510. Principles of Motor Learning, 3 credits.
Principles and theories of learning motor skills and their application in teaching and coaching physical education activities.

PE. 530. Contemporary Trends and Theories in Dance (2, 2), 3 credits.
Investigation through directed readings and studio experiences of current theories and trends in dance as applicable to dance in education performance, choreography, and research.

PE. 540. Physical Education in Elementary Schools, 3 credits.
The planning, conducting and supervising of the physical education program in elementary schools. Special emphasis is given to newer concepts in physical activities for children.

PE. 542. Movement Education for Handicapped Pre-School Children, 3 credits.
Investigation of the methods and materials used to conduct successful pre-school programs in movement education for the handicapped, including techniques of assessment and evaluation.

PE. 570. Administration of Athletics, 3 credits.
Investigation of specific problems and new developments in the administration of athletic programs, including such factors as business procedures, equipment, facilities, conduct of athletic events, and school law and liability.

PE. 575. Coaching the Female Athlete, 3 credits.
Coaching and factors which influence progress for the female athlete. Problems arising from the rapid growth of athletics for girls and women are discussed.

290 Physical and Health Education
Recreation


An introductory course for persons interested in professional recreation. Special attention is given to leadership skills. (An elective open to all students.)

REC. 286. *Camp Leadership* (1, 2), 2 credits.

Designed to develop those qualities and skills necessary for leadership in camping. Attention is given to camping philosophies and organizational techniques. (An elective open to all students.)


History, philosophy; influence of recreation and leisure movements on society; technological, economic and community forces affecting recreation.


Planning, organizing and conducting recreation programs in a variety of settings and program fields.

REC. 386. *Recreation and the Aging*, 3 credits.

Preparation for planning and conducting leisure time programs for the aging and retirees.

REC. 470. *Field Work in Camp Counseling*, 3 credits.

"In-the-field" practical experience by maintaining residency for at least an eight week period at an American Camping Association Accredited Camp. The student must submit in writing the plans for the field work, and these must be approved by the instructor prior to enrolling in the course. Prerequisite: Rec. 286 or approval of the instructor.

Health

HTH. 204. *Emergency Health Care* (2, 1), 2 credits.

A survey of various dimensions of the legal aspects of emergency care, cardiorespiratory emergencies, hemorrhage control, wounds, shock, heat injuries, and other health emergencies. Selected Red Cross and Medical Self-Help Certification available.

HTH. 205. *Prevention and Care of Athletic Injuries* (1, 2), 2 credits.

Basic preventative procedures and treatment for athletic injuries. Methods of wraps and applying protective padding with wrapping and taping will be included.

HTH. 223. *Elements of Injury Control*, 3 credits.

A survey of safety problems as they exist in society today, with emphasis on preventative, corrective and compensatory procedures. (Formerly Hth. 203.)

HTH. 270. *Elements of Health Promotion*, 3 credits.

A survey of principles for the promotion of optimum individual, family, and community health through intelligent self-direction of health behavior. Topics include the physical, mental, social dimension of health economics, disease control, human sexuality, chemical abuse, injury control and nutrition. (Formerly Hth. 200.)

HTH. 272. *Sexuality of Young Adults*, 3 credits.

An in-depth study of the sexuality of college students. Emphasis will be placed upon the development of sexuality with attention given the psychological, physiological, and sociological implications. (Formerly Hth. 220.)
An advanced course involving prevention, treatment, and rehabilitation of athletic injuries. Advanced taping and wrapping are also included. *Prerequisites*: Bio. 290 and Hth. 205.

HTH. 304. A, B, C. *Sports Medicine Laboratory* (0, 10), 2 credits.
A minimum of ten hours each week of practical experience in the Sports Medicine Laboratory, working with athletes. *Prerequisites*: Hth. 205 and Hth. 303.

HTH. 305. *Therapeutic Exercise* (1, 2), 2 credits.
Methods and procedures for rehabilitation of muscular and joint injuries involved in athletics and physical education as well as the use of therapeutic exercise equipment. *Prerequisite*: Hth. 205.

Problems of traffic and driver safety as they exist in our present society. *Prerequisite*: Operator’s license. (Formerly Hth. 304.)

HTH. 339. *Motorcycle Safety Education* (1, 2), 2 credits.
The motorcycle driving task, special problems of motorcycle driving in traffic, and methods and materials in teaching motorcycle safety education to high school students. *Prerequisite*: Hth. 330.

HTH. 352-353. *Environmental Health*, 3 credits each.
An investigation of environmental factors and their effects on the health of the individual, community, and society. (Formerly Hth. 320.)

HTH. 354. *Principles of Community Health*, 3 credits.
The study of the nature, extent, and causes of community health problems and consideration of the elements of public health programs and community structure in the possible solution of these problems. Field work and observations required. (Formerly Hth. 314.)

HTH. 355. *Progress in Disease Control*, 3 credits.
Exploration of the major diseases that affect man’s quality of life. Emphasis is placed on the prevention of these disorders and how health practices influence the incidence of disease.

A study of health services and environmental factors which contribute to the promotion of health and prevention of disease and their interrelationships with health instruction. Emphasis is given to health appraisals and scientific bases for a healthful environment. (Formerly Hth. 300.)

HTH. 371. *Health Appraisal of School Children*, 1 credit.
The utilization of health appraisal techniques in a school environment for screening purposes. *Prerequisite*: Hth. 370.

HTH. 374. *Health Problems of the Young Adults*, 2 credits.
Major health problems of young adults are studied, with consideration given to their psychological, physiological, sociological and economic ramifications. *Prerequisite*: Hth. 270 or equivalent. (Formerly Hth. 306.)
HTH. 378. **The Use and Effects of Drugs**, 3 credits.

A study of the use and pharmacological properties of popular legal and illegal drugs, and their effects on the health of individuals and society. (Formerly Hth. 318.)

HTH. 404. **Emergency Health Care Instructor** (0, 2), 1 credit.

Methods and procedures for teaching emergency health care. Instructor certification by the American National Red Cross available. **Prerequisite: Hth. 204 and approval of the instructor.**

HTH. 430. **Laboratory Methods and Educational Media in Driver and Traffic Safety**, 3 credits.

The role of laboratory programs in driver and traffic safety. Students will design and evaluate laboratory procedures, methods, and instructional material using existing automated driver and traffic safety equipment. (Formerly Hth. 401.)


The nature, function and application of traffic rules, regulations, and law as they apply to safe and efficient movement of people and goods in a broadly conceived traffic accident prevention program.


In-depth study of federal guidelines set forth in the Williams-Steiger Occupational Safety and Health Act of 1970. These guidelines clearly outline specific behaviors that must be implemented that would result in improved safety or health for specifically designated employees.

HTH. 450. **Epidemiology**, 2 credits.

Measuring disease frequency, classifying ill or disabled persons, developing morbidity and mortality data, and tabulating the characteristics of the host.

HTH. 453. **Community Health Science Techniques**, 2 credits.

Study of the functions of community health educators—their work methods and practices, and the principles and procedures for working with people individually and in groups.

HTH. 454. **Field Work in Community Health**, 6 credits.

Full-time directed field experience in a health agency. Opportunity provided to work with schools, community groups and professional organizations. Student furnishes off-campus living and traveling expenses. **Prerequisite: Approval of instructor and a 2.5 grade point average.**

HTH. 471. **Health Aspects of Gerontology**, 3 credits.

Promotion of health in the aged, physiological aspects of the aging process, community, state, and federal health programs and services for the aged.


The scientific foundations, recent developments, and effects on wholesome living of nutrition, genetics, and specific areas in personal health. Independent research in additional areas of health will be emphasized.

HTH. 490. **Special Studies in Health Education**, 1-3 credits each semester.

Designed to give the superior student in health education an opportunity to do independent study and/or research under faculty supervision. **Prerequisite: Permission of the Head of the Department.**

*Physical and Health Education* 293
HTH. 501. Workshop in Health Education, 3 credits.
An intensive investigation of one of the major current health problems such as sex education, drug abuse or environmental health.

HTH. 510. Human Sexuality, 3 credits.
An interdisciplinary team approach is used to study the many specific components of human sexuality as they particularly relate to the physical, social, and emotional health of children, adolescents, and adults. Such topics as physical and sexual changes during adolescence, abortions and contraceptives are discussed.

HTH. 550. Recent Developments in Health Science, 3 credits.
A survey of recent developments and trends in medical and paramedical programs and topics.

HTH. 560. Health Economics, 3 credits.
The analysis of the health dollar in terms of the purchase of health products and services including medical and allied medical care, insurance, health agencies, quackery and hospitals.
DEPARTMENT OF PSYCHOLOGY

Dr. Harold J. McGee, Head of the Department

Professors Bilsky, C. Caldwell, Engel, W. Hall, D. Hanson, Hart, Haynes, Jennings, McGee, Mundy, and Reubush; Associate Professors Butler, Couch, Driver, Harris, Kuhns, Olivas, Roweton, Saadatmand, and Swanson; Assistant Professors Andreoli, Brown, Daniel, Finch, J. Grayson, Gonzalez, Leonard, McIntire, McKee, H. Moore, Vance, and Wettstone; Instructors E. Nelson and Webb.

The Department of Psychology has three broad goals: (1) to prepare Psychology majors wishing to end their studies after the bachelor’s degree and to then seek employment in the human service fields; (2) to prepare students for graduate work by offering them a rigorous background in psychology; and (3) to provide service courses for students in other academic programs.

Psychology majors within the first approach will be trained for a career in the pre-professional applications of psychology to the human service fields, e.g., probation workers, employment interviewers, gerontological centers, day care centers, institutions for the retarded, and other helping occupations. Within the second approach students will receive the fundamental knowledge needed for professional/scientific training at the graduate level leading to possible careers in higher education, clinical psychology, school psychology, counseling psychology, research, etc.

Major Requirements

For a major in psychology the student must satisfactorily complete a minimum of 36 semester hours according to the following schedule.

A. All students majoring in psychology will be required to successfully complete

1. Psyc. 231-232, General Psychology
   or
   Psyc. 233-234, Human Growth and Development
2. Psyc. 359, Psychological Statistics
3. Psyc. 386, History and Systems of Modern Psychology

A student must successfully complete either the General Psychology sequence or the Human Growth and Development sequence. One semester of General Psychology and one semester of Human Growth and Development will not satisfy the major requirements.
B. All students majoring in psychology will be required to successfully complete at least 3 semester hours from each area below:

**Area I**

Psyc. 369, Psychology of Early Childhood  
Psyc. 379, Educational Psychology  
Psyc. 478, Growth and Development in Adolescence  
Psyc. 481, Adult Development and Aging  
Psyc. 482, Death and Dying: Thanatology  
Psyc. 488, Mental Tests and Measurements

**Area II**

Psyc. 320, Perception and Information Processing  
Psyc. 355, Experimental Psychology  
Psyc. 360, Physiological Psychology  
Psyc. 479, Psychology of Learning

**Area III**

Psyc. 357, Psychology of Personality  
Psyc. 358, Abnormal Psychology  
Psyc. 480, Sensitivity Training and Small Groups  
Psyc. 483, Principles of Behavior Modification  
Psyc. 485, Psychology of Motivation  
Psyc. 487, Social Psychology  
Psyc. 489, Community Psychology  
Psyc. 491, Modern Clinical Psychology

C. In addition to the above requirements all students majoring in psychology will be required to successfully complete 15 semester hours of electives that have been approved by a faculty advisor.

A maximum of 12 semester hours of 200 level courses in psychology may be taken toward the major. A maximum of 6 semester hours of Counselor Education courses may also be taken toward the major. SpEd. 340 (The Exceptional Child), SpEd. 350 (The Gifted), SpEd. 365 (The Culturally Disadvantaged), and SoSW. 290 (Interventionist Methods and Skills) may be chosen as electives to fulfill the psychology major requirement.

**Minor Requirements**

A minor in Psychology will include Psyc. 231-232 (or Psyc. 233-234) and twelve additional semester hours in Psychology as recommended by the Head of the Department.
The Department of Psychology has three graduate programs. One program leads to an M.A. in General Psychology while the other two programs lead to an M.Ed. degree in School Psychology or in Counselor Education. Inquiries should be directed to the Office of Graduate Studies or to the respective coordinators of the programs in the Psychology Department.

THE PSYCHOLOGY REQUIREMENTS FOR STUDENTS IN TEACHER EDUCATION PROGRAMS

Students planning to teach need six semester hours of psychology and must select courses which qualify for certification in the Commonwealth of Virginia. In order to qualify for certification students must successfully complete Psyc. 233-234, Human Growth and Development, except as noted below:

Early Childhood Major

Psyc. 233, Psyc. 369, and ECEd. 385 are required unless previously approved psychology courses have been accepted for transfer into the program. Students who have three semester hours of General Psychology must complete the above listed sequence. Students with four or more semester hours of General Psychology must complete Psyc. 369 and ECEd. 385.

Elementary Education Major

Psyc. 233 and 234 are required unless previously approved psychology courses have been accepted for transfer into the program. Students who have three semester hours of General Psychology must complete the above listed sequence. Students with four or more semester hours of General Psychology must complete Psyc. 234 and either Psyc. 379 or Psyc. 510.

Secondary Education Minor

Psyc. 233 and 234 are required unless previously approved psychology courses have been accepted for transfer into the program. Students who have two to four semester hours of General Psychology must complete the above listed sequence. Students with six semester hours of General Psychology must complete Psyc. 478.

Students should consult with their advisor before selecting these courses. Students with problems about the psychology requirement for teacher certification should see the Head of the Department or the Dean of the School of Education.
MAJOR IN PSYCHOLOGY  
(B.S./B.A. Degree)  

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<td>Natural Science</td>
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<tr>
<td>Psyc. 231-232</td>
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<td>or Psyc. 233-234</td>
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*(same as before)*

The above sequence of courses is one example of a program that leads to graduation with a major in psychology. Each student should meet regularly with their advisor in order to plan their specific course schedule.

**PROGRAM FOR A MAJOR IN PSYCHOLOGY QUALIFYING FOR THE SECONDARY COLLEGIATE PROFESSIONAL CERTIFICATE**

In addition to the General Studies and academic major requirements, students desiring secondary teacher certification must complete the following as a part of their degree program:

(1) Psyc. 233 and 234—*Human Growth and Development* (sophomore year).

(2) Educ. 360—*Foundations of Curriculum* (junior year).

(3) SeEd. 371H—*Clinical Techniques, Social Science Methods* (normally in the second semester of the junior year or first semester of the senior year).
(4) Educ. 470—History and Philosophy of Educational Thought (senior year)
or
Educ. 471—Values and Teaching (senior year).
(5) Educ. 480—Student Teaching (senior year).
(6) A course in U.S. History (anytime in the program).
(7) Hth. 370—The School Health Program (anytime in the program).

Students seeking certification are encouraged to consult regularly with the Department of Secondary Education.

Description of Courses

Psychology

PSYC. 200. Interpersonal Skills for Resident Advisors, 1 credit.
Designed to give resident advisor trainees understanding of interpersonal relations. Enrollment is limited to students selected as resident advisors.

PSYC. 225. Psychology of Careers, 3 credits.
Describing vocational development as part of individual growth, content is drawn from vocational psychology.

PSYC. 231. General Psychology I, 3 credits.
A study of the nervous system, biofeedback, sensation, perception, altered states of consciousness, learning, memory, language, sex, aggression, emotion, and the scientific method.

PSYC. 232. General Psychology II, 3 credits.
A continuation of Psyc. 231, including human development, social psychology, personality theory, abnormal psychology, and psychotherapy.

PSYC. 233. Human Growth and Development I, 3 credits.
Focus on human growth and development from pre-natal thru aging. Highlighted topics include physical, psychosexual and moral development, social and emotional behavior, and intelligence and personality. Classroom observations of children are required. This course is designed to fulfill teacher certification requirements.

PSYC. 234. Human Growth and Development II, 3 credits.
The course further explores human development. Emphases are placed on human learning with discussions of theories, practical applications of motivation, tests and measurement, and exceptionalities. Requirements include case study methods and classroom observation of children. This course is designed to fulfill teacher certification requirements.

PSYC. 250. Psychology of Adjustment, 3 credits.
The dynamics of health adjustment are contrasted with maladjustment.
PSYC.-ENG. 300. Exploring Personality Through Literature, 6 credits.

A six-credit hour survey of personality theory approached through readings in literature and psychology. Students are required to enroll in Eng. 300 and Psyc. 300 simultaneously. Prerequisites: Psyc. 231-232 or 233-234, Eng. 101-102, plus three hours chosen from General Studies requirements in literature.

PSYC. 320. Perception and Information Processing, 3 credits.

Explores the nature and development of human sensory capabilities, processing and storing of sensory information, and how these affect perception of the environment. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 355. Experimental Psychology (3, 2), 4 credits.

An introduction to experimental methods as applied to selected problems in psychology. Attention is given through lecture and laboratory to the design and conduct of experiments, data analysis, and reporting of experimental results. Prerequisites: Psyc. 231-232 or 233-234 and Math. 105 or equivalent; also Psyc. 359.

PSYC. 357. Psychology of Personality, 3 credits.

Essential elements of leading theories of personality with an emphasis on implications of these theories for human behavior. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 358. Abnormal Psychology, 3 credits.

The origin, symptoms, and classification of mental abnormalities. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 359. Psychological Statistics, 3 credits.

Descriptive and inferential statistics as applied to experimental psychology. Includes measurement, derived scores, central tendency and variation, significance tests, correlation and regression, variance analyses, and selected nonparametric techniques. Prerequisites: Psyc. 231-232 or 233-234 and Math. 105 or equivalent.

PSYC. 360. Physiological Psychology, 3 credits.

An examination of the physiological correlates of behavior. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 369. Psychology of Early Childhood (2, 2), 3 credits.

The psychology of the young child and philosophy and techniques of early childhood education. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 379. Educational Psychology, 3 credits.

Applications of psychological principles to classroom settings. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 386. History and Systems of Modern Psychology, 3 credits.

The development of the history and systems of psychology with emphasis on recent developments. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 397. Field Experience in Abnormal Psychology (1, 3), 3 credits.

Through seminars, site visitations, and practicum experiences, the advanced student is exposed to psychological work roles in mental health, rehabilitation, and corrections. Emphasis is placed on gaining understanding about etiological, dynamic, and treatment processes. Prerequisite: Psyc. 358.
PSYC. 398. Field Placement in Psychology, 6 credits.

Supervised practicum in a psychological services agency. Orientation to agency's service, policies, personnel, and professional ethics is provided. Prerequisites: Psyc. 231-232 or Psyc. 233-234 or equivalent. Approval from advisor, course coordinator, and Department Head required one month prior to registration. Guidelines are available in the Department Office.

PSYC. 400. Topics in Psychology, 1-3 credits.

Exploration of a significant psychological topic in depth. The topic for each semester will be announced in the schedule of classes. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 478. Growth and Development in Adolescence, 3 credits.

Examination of the essential nature of adolescence. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 479. Psychology of Learning, 3 credits.

Basic principles of learning and conditioning, with a consideration of extinction, reinforcement, generalization, discrimination, transfer, concept formation and verbal learning. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 480. Seminar in Sensitivity Training and Small Groups, 3 credits.

Designed to acquaint undergraduate students with theories and applications of sensitivity training and small groups. The ethical and responsible use of sensitivity training and groups will be examined. Will include supervised experiences and critical discussions of issues arising in the use of these methods. Prerequisite: Permission of instructor.

PSYC. 481. Psychology of Adult Development and Aging, 3 credits.

The physical, social, and psychological factors faced by the adult and the progression through his/her life span. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 482. Death & Dying: Thanatology, 3 credits.

Psychological theories about death, including ways in which individuals and society deal with death. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 483. Principles of Behavior Modification, 3 credits.

Applications of reinforcement principles in a variety of situations. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 485. Psychology of Motivation, 3 credits.

An advanced study of motivation in relation to perception, learning, emotions, and problem solving. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 487. Social Psychology, 3 credits.

A study of the psychological factors involved in social behavior considering the interaction of personalities in society, social attitudes, culture, institutions, customs, crowd behavior, clubs, public opinions, propaganda, leadership, and problems of community life. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 488. Mental Tests and Measurements, 3 credits.

Standardized psychological tests of mental ability, achievement, aptitude and personality with a brief review of statistical procedures necessary for interpretation of test results. Prerequisites: Psyc. 231-232 or 233-234.
PSYC. 489. Community Psychology, 3 credits.
Focus on emerging trends and models in the application of psychology to community stress, prevention programs, human resources, and change. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 490. Special Studies in Psychology, 1-3 credits each semester.
An opportunity to do independent study of psychological topics with faculty guidance. A written plan for the study must be submitted to the Head of the Department for approval a week prior to registration. A guideline-description is available in the Psychology Department Office. Prerequisites: Written approval from advisor, project supervisor and Department Head (see guidelines).

PSYC. 491. Modern Clinical Psychology: Theory and Practice, 3 credits.
An introduction to the field of clinical psychology. Prerequisites: Psyc. 231-232 or 233-234.

PSYC./SOCI./PE. 496. Psychological and Sociological Aspects of Sport, 3 credits.
A study of the psychological and sociological implications of sport and the effect of sport on United States and other cultures.

PSYC. 499. Honors, 6 credits. Year Course.
(See catalog descriptions entitled, “Graduation With Distinction” and “Graduation With Honors.”)

PSYC. 501. Workshop in Psychology, 1-3 credits.
Designed to provide a detailed study of a particular topic of interest in psychology. Prerequisite: Permission of Head of Department.

The basics of computer programming with an emphasis on problems encountered by the behavioral scientist both BASIC and FORTRAN will be considered. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 505. Systems and Theories of Psychology, 3 credits.
A detailed study of systems and theories of psychology. Special emphasis will be placed on the philosophy of psychology as a science and the logic of system building. Prerequisite: Psyc. 386 or equivalent.

PSYC. 506. Potentialities of Aging, 3 credits.
Designed to offer advanced student experiences in coming to understand and working with the assets and potentialities of older people. Prerequisites: Psyc. 231-2, or 233-4.

PSYC. 510. Advanced Developmental Psychology, 3 credits.
The origins and development of behavior during the prenatal period and through adolescence. Prerequisites: Psyc. 231-232 or 233-234.

PSYC. 522. Advanced Abnormal Psychology, 3 credits.
Emphasizing etiologies, symptoms and therapies of the neuroses and psychoses. Prerequisites: Psyc. 231-232 or 233-234 and 358.

PSYC. 525. Role of the School Psychologist, 3 credits.
Provides an understanding of the setting, issues and responsibilities with which a school psychologist must deal.

302 Psychology
PSYC. 550. Creative Problem Solving, 3 credits.

Major psychological theories relating to the explication and training of human creative problem solving are exhaustively explored. Course emphasis is also on common measurement dilemmas and current programmatic thrusts. Prerequisite: Permission of instructor.

Counselor Education

COED. 475. The Teacher's Role in Counseling and Guidance, 3 credits.

Study of the principles of effective school guidance activities with emphasis on the role of the teacher in the guidance program.

COED. 501. Workshops in Counseling, 1-3 credits.

Designed to provide an intensive study of a particular topic in guidance.

COED. 510. Contemporary Issues in Counseling, 3 credits.

An in-depth examination of contemporary issues including counselor ethics, ethnic group relations, sexism, differing life patterns and racism.

COED. 520. Dynamics of Mental Health, 3 credits.

A detailed study of the personal and social factors which are related to the development of individual mental health and mental illness.

COED. 530. Counseling in Elementary Education, 3 credits.

A detailed study of the roles of counselors and guidance personnel in elementary schools. Emphasis in counseling techniques is stressed.

COED. 540. Personnel Services in Higher Education, 3 credits.

A detailed study of the personnel services offered in colleges and universities.

COED. 541. Residence Hall Administration, 3 credits.

A study of residence hall administration, physical plant, budgets, staff selection and training, developmental needs of students, educational programming, life style options, and residence hall policies.

COED. 550. Organization and Administration of Guidance Programs, 3 credits.

An in-depth consideration of the theory, philosophy, principles, organization, and personnel practices involved in pupil personnel services.

COED. 560. Introduction to Community Agency Counseling, 3 credits.

A study of the organization, scope, and nature of various community agencies from administrative and counseling perspectives. Field trips to representative institutions will be included.

COED. 561. Introduction to Vocational Rehabilitation Counseling, 3 credits.

Covers the rehabilitation process including history, philosophy, and contemporary issues in the field with focus on the counseling process, use of community resources, and involvement of helping professions for rehabilitation of vocationally handicapped individuals.
COED. 562. *Introduction to Counseling the Aged*, 3 credits.

Explores topics in the approaches to counseling with the aged, including a study of community resources for the aged and techniques for improving means of relating to the elderly.

COED. 563. *Alcoholism Counseling*, 3 credits.

A study of the disease alcoholism to include related personal, social and physiological factors, and methods of rehabilitation and counseling the alcoholic.

COED. 564. *Introduction to Marriage and Family Counseling*, 3 credits.

A study of the various topics and approaches of marriage and family counseling, focusing on family dynamics and social change.
DEPARTMENT OF SECONDARY EDUCATION AND SCHOOL ADMINISTRATION

Dr. William D. Smith, Head of the Department

Professors Fox, Lehman, and Roberson; Associate Professors Finlayson, Graham, Liles, Moore, Roller, Smith, Stewart, and Sturm; Assistant Professors Allain, Ihle, Jackameit, Joyce, and Schindler; Instructor Connors.

PROGRAM IN PROFESSIONAL EDUCATION FOR SECONDARY TEACHERS

The Department of Secondary Education and School Administration offers a minor for students majoring in a discipline and planning to enter a secondary teaching role. To be fully certified to teach in the secondary schools of Virginia, the student must possess a Collegiate Professional Certificate issued by the State Department of Education. The minor in Secondary Education is designed to assure certification upon the completion of all general, specific, and professional education requirements and receipt of the baccalaureate degree. The student must also meet the admission and retention criteria, outlined on pages 261-262 of this catalog, in order to be recommended for certification.

A methodology sequence (Clinical Techniques) is required and must be taken prior to the student teaching experience. To provide for individual needs, each student's methodology sequence is planned with the student's career (minor) advisor. Students should note that prerequisites are established for many of the courses included in the minor. Any exceptions to these requirements must be approved by the Head of the Department and the Dean of the School of Education.

Students desiring secondary certification must also complete Hth. 370 (The School Health Program) and a course in United States History.

CAREER ADVISORY SYSTEM IN SECONDARY EDUCATION

Freshman students planning to become teachers in secondary schools are advised to enroll in SeEd. 101, Orientation to the Profession, at which time the student will be assigned a career advisor in the Department of Secondary Education and School Administration. The career advisor will advise the student concerning job opportunities in the various secondary subject areas, the proper sequence of education courses, practicum opportunities in local secondary schools, and spe-
cial programs and elective courses in the Department. By consulting regularly with their career advisor in Secondary Education, students can continually evaluate their career objectives. In addition to the General Studies and academic major requirements, students desiring teaching certification should consult the Teacher Certification Manual. This manual is available in each academic department and in the School of Education.

SCREENING PROGRAM IN SECONDARY EDUCATION

The Department of Secondary Education will utilize the screening procedures established by the School of Education and will apply these criteria to students who plan to enter secondary teaching roles. All staff members who are associated with any aspect of teacher education are requested to identify students who possess traits contrary to those stated in the criteria for admission and retention in teacher education. Staff members will submit a written report on such students to the Head of the Department of Secondary Education. The Department Head will forward all unfavorable reports concerning individual students to the School of Education screening committee for their consideration and action.

A minimum of 23 to 26 semester hours is required for a minor in Secondary Education. The required professional education courses, including electives, are given below.

MINOR IN SECONDARY EDUCATION
(Professional Courses)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Junior or Senior Year</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SeEd. 101 (elective)</td>
<td>1</td>
<td>Methods Course(s) (Consult advisor for appropriate course(s) and semester.)</td>
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</tr>
<tr>
<td>Sophomore Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psyc. 233-234 (required)</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SeEd. 101 (elective)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Year</td>
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<td>Educ. 360 (required)</td>
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<td>Educ. 480 (required)</td>
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</tr>
<tr>
<td>SeEd. 365 (elective)</td>
<td>3</td>
<td>Educ. 470 or 471 (required)</td>
<td>3</td>
</tr>
<tr>
<td>SeEd. 381 (elective)</td>
<td>3</td>
<td>SeEd. 490 (elective)</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SeEd. 401 (elective)</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educ. 536 (elective)</td>
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<td>SeEd. 550 (elective)</td>
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<tr>
<td></td>
<td></td>
<td>Educ. 405 (elective)</td>
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</tbody>
</table>

Students desiring secondary certification must also complete Hth. 370 (The School Health Program) and a course in United States History. For students planning to seek teaching certification, Psyc.
233-34 must be a part of their professional education sequence. Therefore, these courses may not be used to fulfill their General Studies Social Science option.

**Description of Courses**

**Secondary Education**

**SEED. 101. Orientation to the Profession, 1 credit.**

Designed to provide occupational and educational information about careers in secondary schools. Observation and peer interaction opportunities are provided. For freshman and sophomore secondary education students only.

**SEED. 365. Contemporary Trends in Secondary Education, 3 credits.**

Study of current developments in the curriculum, organization and administration, extra-curriculars, staffing, and instructional delivery systems of American secondary schools.

**SEED. 370. Methods and Materials of Teaching in the Secondary School, 3 credits.**

Topics including classroom management, principles of learning, objective planning, professional responsibility, micro-teaching, evaluation, and the general use of common types of audio-visual equipment and materials. Prerequisites: Psyc. 233-234 and Educ. 360. Special department head approval is required for enrollment.

**SEED. 371 (A through M) and SEED./BEOA. 380, SEED./HE. 303, SEED./DE. 383. Clinical Techniques—Methodology Sequence, 2-6 credits.**

Specific technique and methods for preservice teachers in their respective disciplines. Competencies to be developed will include: classroom management, planning, instructional modes, and evaluation of pupil learning. Field-based activities will include a practicum experience and video tape micro-teaching. Prerequisites: Psyc. 233-234 and Educ. 360.

**SEED. 371A. Clinical Techniques—Art Education Methods, 4 credits.**

**SEED. 371B. Clinical Techniques—English Education Methods, 6 credits.**

**SEED. 371C. Clinical Techniques—Foreign Language Education Methods, 6 credits.**

**SEED. 371D. Clinical Techniques—Junior High Music Methods, 2 credits.**

**SEED. 371E. Clinical Techniques—Choral Music Methods, 2 credits.**

**SEED. 371F. Clinical Techniques—Instrumental Methods and Administration I, 3 credits.**

**SEED. 371G. Clinical Techniques—Instrumental Methods and Administration II, 3 credits.**

**SEED. 371H. Clinical Techniques—Social Studies Education Methods, 6 credits.**

**SEED. 371I. Clinical Techniques—Natural Sciences Education Methods, 3 credits.**

*Secondary Education and School Administration* 307
SEED. 371J. *Clinical Techniques—Communication Arts Education Methods*, 6 credits.

SEED. 371K. *Clinical Techniques—Math Education Methods*, 6 credits.

SEED. 371L. *Clinical Techniques—Health Education Methods*, 2 credits.

SEED. 371M. *Clinical Techniques—Physical Education Methods*, 2 credits.


SEED./BEOA. 380A. *Clinical Techniques—Basic Business Subjects*, 2 credits.

SEED./BEOA. 380B. *Clinical Techniques—Accounting and Data Processing Methods*, 2 credits.

SEED./BEOA. 380C. *Clinical Techniques—Typing and Related Subjects Methods*, 2 credits.

SEED./BEOA. 380D. *Clinical Techniques—Shorthand and Related Subjects Methods*, 2 credits.

SEED./DE. 383A. *Clinical Techniques—Distributive Education Methods*, 3 credits.

SEED./DE. 383B. *Clinical Techniques—Distributive Education Coordination*, 3 credits.

SEED. 381. *Field Experience (Practicum) in Secondary Education*, 3 credits.

Provides practical classroom experience for preservice secondary teachers. Under the supervision of an inservice teacher, students engage in a variety of classroom activities commensurate with their professional preparation. Prerequisite: Psyc. 233-234 and Educ. 360.


Current problems and issues in secondary education relating to the professional education of secondary teachers, e.g., classroom discipline, value clarification, law, finance. Prerequisite: Permission from the Head of the Department.

SEED. 490. *Special Studies in Education*, 1-3 credits.

Independent study of researchable problems in secondary education. The plan for the study must be approved by the faculty advisor and by the Head of the Department.


Individual and group study of content, methodology, and instructional materials essential to the design and implementation of effective instructional programs in modern mathematics.


Learning principles, curricula, methods of instruction, facilities, equipment, materials, and student evaluation are topics explored in their relationship to the science program of the secondary school.

308 *Secondary Education and School Administration*
SEED. 538. *Teaching Social Studies in the Secondary School*, 3 credits. (Summer only.)

Designed to assist experienced secondary teachers in the improvement of social studies instruction. Attention is given to innovative programs and materials.

SEED. 550. *Junior High and Intermediate School Education*, 3 credits.

Introduces in-service teachers to the concept of the junior high, middle school, and intermediate school and to the role of these unique units in American education. Consideration will be given to the philosophy, functions, and total program of these schools, including curriculum, guidance, personnel, plant and administration.

*(Other five hundred level courses are listed in the Graduate Bulletin.)*

### Description of Courses

#### Education

**EDUC. 360. Foundations of Curriculum, 3 credits.**

A study and evaluation of the factors, ideas, and issues which influence the public school curriculum. Consideration is given to such topics as: basic ideas which influence organization and content; various programs found in theory and practice; and the scope and sequence of the curriculum. *Prerequisites: Psyc. 233-234 or equivalent.*

**EDUC. 405. Evaluation in Teaching, 3 credits.**

The construction, use, and interpretation of teacher-made tests. Evaluation as an aid to instruction and to diagnosing learning difficulties in the classroom. An introduction to the testing program in the schools.

**EDUC. 470. History and Philosophy of Educational Thought, 3 credits.**

Critical analysis of current problems in education as they relate to the major philosophies of modern education. *Prerequisites: Psyc. 233-234 and Educ. 360 or equivalents.*

**EDUC. 471. Values and Teaching, 3 credits.**

A study of the process of valuing and the problems of teaching values. Attention will be given to translating theoretical principles into effective classroom practice. *Prerequisites: Psyc. 233-234 and Educ. 360 or equivalents.*

**EDUC. 480. Directed Teaching, 3-8 credits.**

The major purpose of directed teaching is to enable the pre-service teacher to apply, in the public school classrooms and comprehensive child development programs, those skills, understandings, and attitudes acquired in all components of teacher education. Under the guidance of cooperating teachers and college supervisors, the student is provided activities designed to familiarize him/her with all aspects of the classroom teacher’s role. *Prerequisites: Psyc. 233-234, Educ. 360, the appropriate methods courses, and permission of Coordinator of Student Teaching.*

**EDUC. 501. Workshop in Education, 3 credits.**

Workshop experience relative to the current needs evident in elementary and secondary school programs. No more than six credit hours earned in workshops in Education may be applied to a major program in Education and no more than three hours may be applied to a minor program in Education.
EDUC. 505. *The Role of the School in Society*, 3 credits.
A study of the forces affecting the organization, administration, curriculum, and other features of the school in the United States today. Particular emphasis is given to current issues and trends in American culture that give direction to school practice.

EDUC. 507. *Knowledge and Education*, 3 credits.
An examination of historical and contemporary issues in the epistemology of education, including sources and nature of knowledge, methods of knowing, and implications for modern educational theory and practice.

Study of selected problems encountered by teachers in multi-ethnic schools. Attention will be given to (1) human relations activities, and (2) selected resources useful in creating an appreciation of America's ethnic diversity.

EDUC. 540. *Supervising the Student Teacher*, 3 credits.
The student teaching experience is explored as a major component of the teacher education program. Specific attention is given to the role of public school personnel in the guidance of the student teacher as an aspirant to the role.

EDUC. 572. *Introduction to Adult/Continuing Education*, 3 credits.
Designed to develop an appreciation of the role of Adult Education in society and of the adult as a learner. The scope, trends, and issues in Adult Education, the needs, interests, and characteristics of adults as students will be covered.

(Other five hundred level courses are listed in the Graduate Bulletin.)
The primary objectives of the undergraduate programs of the Department of Special Education are: (1) to prepare students to become skilled teachers of the mentally retarded or emotionally disturbed, and (2) to offer minor programs to meet the needs of students majoring in other departments.

**Major Programs**

The Department offers majors in Mental Retardation and Emotional Disturbance. These programs are designed to qualify students for the Virginia Collegiate Professional Teaching Certificate. Graduates will be certified to teach in public school or institutional settings in the areas of Emotional Disturbance or Mental Retardation in grades K-12.

The Child Study Center and Anthony-Seeger Campus School provide observation and practicum placements for students in Special Education. In addition, the Educational Media Laboratory (EML) contains a large collection of special education instructional materials and media. Area public schools and state institutions provide additional observation and practicum placements.

**Minor Programs**

A minimum requirement for a minor in general special education is 18 semester hours, including SpEd. 340, SpEd. 370, and 12 additional semester hours approved by the Department.

Completion of the minor program will not qualify the student for endorsement to teach in the area.

**Advisory System**

Students who major in the Department of Special Education are assigned an advisor to aid them in all phases of the academic program. The course sequences in emotional disturbance and mental retardation are designed to provide maximum practical experience. Because of the
heavy practicum load during the Junior and Senior years, students should consult closely with their advisors on their academic programs. Students should plan a course of study for their major program with their advisors early in their college career.

MAJOR IN SPECIAL EDUCATION—EMOTIONAL DISTURBANCE  
(B.S. Degree)

<table>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
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<th>Credit Hours</th>
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</thead>
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<tr>
<td>*Eng. 101-102</td>
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<td>*Oral Communication</td>
<td>3</td>
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<tr>
<td>Psyc. 233-234</td>
<td>6</td>
<td>*Non-U.S. History</td>
<td>3</td>
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<td>*Hist. 233 or 234</td>
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<td>Read. 359</td>
<td>3</td>
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<tr>
<td>*Social Science</td>
<td>3</td>
<td>SpEd. 340</td>
<td>3</td>
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<tr>
<td>*Math</td>
<td>6</td>
<td>Educ. 360</td>
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<td>*Natural Science</td>
<td>8</td>
<td>*Physical Education</td>
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<td></td>
<td>*Fine Arts</td>
<td>3</td>
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<td></td>
<td></td>
<td>*Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SpEd. 380</td>
<td>3</td>
</tr>
<tr>
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<td>SpEd. 345</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hth. 370</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>*Social Science</td>
<td>3</td>
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<td>SpPu. 200</td>
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<td>SpEd. 420</td>
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<tr>
<td>Read. 439</td>
<td>3</td>
<td>Elective from “B”</td>
<td>3</td>
</tr>
<tr>
<td>SpEd. 370</td>
<td>3</td>
<td>Elective from “A”</td>
<td>3</td>
</tr>
<tr>
<td>SpEd. 381 or ElEd. 358</td>
<td>3</td>
<td>Electives</td>
<td>12</td>
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<td>Educ. 470 or 471</td>
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<td>SpEd. 355</td>
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<td>Educ. 480</td>
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<td>Psyc. 488</td>
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<td>*Humanities</td>
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**Electives**

“A”—Select 3 hours
- Psyc. 369
- Psyc. 478
- Psyc. 510

“B”—Select 6 hours
- Art 310 or 314
- Soci. 427
- SpEd. 406
- CoEd. 520
- SpEd. 512

*General Studies Requirements*
### MAJOR IN SPECIAL EDUCATION—MENTAL RETARDATION (B.S. Degree)

<table>
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<th>Sophomore Year</th>
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<tr>
<td>*Natural Science</td>
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<td>SpEd. 340</td>
<td>3</td>
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<tr>
<td>Psyc. 233-234</td>
<td>6</td>
<td>SpPa. 200</td>
<td>3</td>
</tr>
<tr>
<td>*Eng. 101-102</td>
<td>6</td>
<td>*Comm. 200, 222, or 226</td>
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<tr>
<td>*Hist. (Non-U.S.)</td>
<td>3</td>
<td>*Social Science</td>
<td>6</td>
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<tr>
<td>*Math.</td>
<td>6</td>
<td>*Humanities</td>
<td>6</td>
</tr>
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<td>*Hist. 233 or 234</td>
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<td>32</td>
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<td>3</td>
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<td>*Fine Arts</td>
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<td>Hth. 370</td>
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<tr>
<td>Read. 359</td>
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<td>Psyc. 488</td>
<td>3</td>
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<td>SpEd. 381 or ElEd. 358</td>
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<td>SpEd. 427</td>
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<td>Electives</td>
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Electives

"A"—Select 6 hours

- Art 310 or 314
- SpEd. 406
- CoEd. 520

*General Studies Requirements

### Description of Courses

#### Special Education

**SPED. 340. The Exceptional Child, 3 credits.**

Introduction to the education and psychology of exceptional children. The nature, needs, and problems of exceptional children and how these relate to educational provisions are studied.

**SPED. 345. The Emotionally Disturbed Child, 3 credits.**

An historical overview of theories concerning causes of psychopathology of children. The identification and analysis of abnormal personality characteristics of children will be discussed. Attention will also be given to methods of prevention and treatment as these relate to teacher education. *Prerequisite: SpEd. 340.*
An introduction to the nature, needs, problems, and education of the gifted.

SPED 355. *Education of the Emotionally Disturbed*, 3 credits.
A study of the specialized curricula and methods used for teaching the emotionally disturbed. Work with exceptional children may be required. *Prerequisite: SpEd. 345.*

A detailed study of the characteristics, diagnosis, treatment, and education of the mentally retarded. *Prerequisite: SpEd. 340.*

A detailed study of the nature of cultural deprivation. The characteristics, diagnosis, treatment, and education of the culturally deprived are discussed.

Principles and techniques of learning applied to research and program development for exceptional individuals. Specific emphasis will be given to operant techniques. *Prerequisite: SpEd. 340.*

SPED 380. *Teaching Language Arts to the Exceptional Child*, 3 credits.
An introduction to the methods, materials, and activities essential to teaching reading, writing, spelling, listening and other language arts skills to exceptional children. *Prerequisite: SpEd. 340.*

SPED 381. *Methods of Teaching Math to Exceptional Children*, 3 credits.
A study of methods and materials used in teaching basic consumer mathematics to the exceptional child. The student is taught the fundamentals of teaching computational skills related to persisting life problems. *Prerequisite: SpEd. 340.*

SPED 406. *Habilitation Services for the Exceptional Individual*, 3 credits.
A study of the habilitation and rehabilitation services which are available to the exceptional individual and his/her family, and the community resources related to their services. Advising parents as to the avenues available academically, socially, and vocationally that are open to their child. *Prerequisites: SpEd. 340 and permission of instructor.*

SPED 410. *Introduction to Learning Disabilities*, 3 credits.
Nature and needs of learning disabled children. Course will present historical and current thinking relevant to the various concepts and practices in the identification and treatment of learning disabilities. Focus of the course will be on different types of learning disabilities and on the professional’s role in working with learning disabled children. *Prerequisite: SpEd. 340 or permission of instructor.*

SPED 420. *Practicum in Special Education*, 3 credits.
Designed for the student who desires an “internship type” of supervised experience to meet a special or unique need. *Prerequisite: Permission of instructor.*

SPED 427. *Curriculum Development in Mental Retardation*, 3 credits.
A detailed study of curricular materials, commercial and teacher prepared, applicable to the mentally retarded. The focus of the course is upon historical concepts relating to mental retardation programs and curriculum development. *Prerequisite: SpEd. 360.*

314 *Special Education*
SPED. 428. Teaching the School Age Mentally Retarded Individual, 3 credits.
Study of the curricula methods and techniques used in teaching the retarded individual from his/her entry into school through terminal work-study programs. Prerequisite: SpEd. 427.

SPED. 448. Education of the Multiply Handicapped and Developmentally Disabled, 3 credits.
A study of programs, curricula, methods, and material used to educate the multi-handicapped, severely handicapped, and developmentally disabled individual. Consideration is given to curricula and methods of teaching these individuals within public school and non-public school settings. Prerequisite: SpEd. 340.

SPED. 490. Special Studies in Special Education, 1-3 credits each semester.
Designed to allow the student to do independent study under faculty supervision. (Offered only with consent of the Head of the Department.)

SPED. 499. Honors, 6 credits.
See catalog descriptions entitled, "Graduation with Distinction", and "Graduation with Honors."

SPED. 501. Workshops in Special Education (Summer), 3 credits.
Designed to provide an intensive study of a particular topic in special education. Prerequisite: SpEd. 340.

SPED. 505. Psychoeducational Analysis in Special Education, 3 credits.
A study of curricular adjustment procedures as determined by intellective, social, emotional, and physical data about the individual. The focus of the course is upon methods of diagnosing the learning strengths and limitations of the individual. Prerequisites: SpEd. 340, Psyc. 488 and permission of instructor.

SPED. 512. Behavior Management in the Classroom, 3 credits.
An application of behavior modification techniques to the control of discipline problems in the classroom. The use of these principles as an aid in learning is also stressed. Prerequisite: Permission of instructor.

SPED. 514. Seminar in Special Education, 3 credits.
An intensive study of current problems and issues in special education. Prerequisites: SpEd. 340 and permission of Head of Department.

SPED. 516. Assessment of Young Handicapped Children, 3 credits.
An intensive study of assessment procedures employed with the preschool handicapped child. Emphasis is placed on the use of developmental-criterion oriented instruments. Students will be required to participate in field-based experiences and competency-based evaluations. Students are required to purchase assessment instruments. Prerequisite: Permission of instructor.

SPED. 517. Methods, Materials, and Curriculum for Young Handicapped Children, 3 credits.
Students are trained to implement Individualized Education Programs designed for preschool handicapped children. Modification or adaptation of existing programs is considered. Emphasis is directed toward the integration of materials, equipment, and curriculum for the preschool handicapped. Prerequisite: Permission of instructor.
SPED. 518. Methods and Materials for Teaching Severe, Profound, and Multihandicapped Children, 3 credits.

Students are trained in the use of methods and materials effective with severe, profound, and multihandicapping conditions. Particular emphasis is directed toward the provision of a comprehensive educational program required by P.L. 94-142. Prerequisite: Permission of instructor.

SPED. 520. Field Experiences for the Gifted, 3 credits.

The purpose of this course is to provide the student with observation and participation experiences with the gifted in educational settings. Prerequisite: Permission of instructor.


An in-depth study of the following topics: (a) characteristics of children with behavior and/or emotional problems; (b) theories on the development of problem behaviors; (c) non-classroom, classroom, and ancillary therapies; (d) screening and assessment procedures; and (e) community resources.
DEPARTMENT OF SPEECH
PATHOLOGY AND AU迪OLGY

Associate Professor O’Hare; Assistant Professors Bennett, Hinkle, Morris, and C. Runyan; Instructors Kaiser, S. Runyan, and Stanley.

The Department of Speech Pathology and Audiology provides pre-professional and professionally oriented course work and practicum experiences directed toward the comprehensive training of those interested in providing services to children and adults with disorders of communication. The principal objectives of the department include: (1) preparation of the undergraduate student to meet the certification standards of the State of Virginia necessary to provide services to speech and language disordered children in the public schools; (2) to provide a concentrated curriculum directed towards the rigorous preparation of the student for graduate study in Speech Pathology, Audiology, and Speech and Hearing Sciences; and (3) to offer minor programs for students majoring in related fields.

The department emphasizes the importance of understanding the basic aspects of normal development of speech, language, and auditory functions in order to deal competently with disorders of human communication. A "learning by participation" philosophy is reflected in clinical practicum experiences which are coordinated through the James Madison University Speech and Hearing Center, the key service component of the department.

The department offers a Bachelor of Science degree in Speech Pathology.

The department offers graduate programs in Speech Pathology (M.S. degree) and Hearing Disorders (M.Ed. degree). Note: A master’s degree is the minimum requirement for competency certification endorsed by the American Speech and Hearing Association.

Inquiries concerning these graduate programs should be directed to the Dean of the Graduate School or the Department Head.

MAJOR PROGRAM

In addition to the General Studies requirements, students majoring in Speech Pathology must take SpEd. 340 and 370, and SpPa. 200, 207, 208, 214, 300, 301, 302, 315, 316, 318, 360, and 370.

Speech Pathology and Audiology 317
MINOR PROGRAM

The minor in Speech Pathology requires a minimum of 18 semester hours of course work including SpPa. 200 (Introduction to Speech and Language Disorders), SpPa. 300 (Children’s Language), and 12 additional semester hours of approved course work.

MAJOR IN SPEECH PATHOLOGY
(B.S. Degree)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Natural Science</td>
<td>8</td>
<td>Hth. 370</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Hist. 233 or 234</td>
<td>3</td>
</tr>
<tr>
<td>History (Non-U.S.)</td>
<td>3</td>
<td>Psyc. 233-234</td>
<td>6</td>
</tr>
<tr>
<td>Math. 107-108</td>
<td>6</td>
<td>SpEd. 340</td>
<td>3</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>SpPa. 200</td>
<td>3</td>
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<tr>
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<td>Physical Education</td>
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<td>31</td>
<td>SpPa. 214</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Soc. Sci.</td>
<td>3</td>
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<tr>
<td></td>
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<td>SpEd. 370</td>
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<th>Junior Year</th>
<th>Credit Hours</th>
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<tr>
<td>Read. 359</td>
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<td>Educ. 470 or 471</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 360</td>
<td>3</td>
<td>Educ. 480</td>
<td>8</td>
</tr>
<tr>
<td>Soc. Sci.</td>
<td>3</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>SpPa. 300</td>
<td>3</td>
<td>Psyc. 488</td>
<td>3</td>
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<td>SpPa. 301</td>
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<td>Electives</td>
<td>14</td>
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<tr>
<td>SpPa. 302</td>
<td>1</td>
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<tr>
<td>SpPa. 315</td>
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<td>SpPa. 316</td>
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<td>SpPa. 318</td>
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<td>SpPa. 360</td>
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<tr>
<td>Humanities</td>
<td>3</td>
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<td></td>
<td>34</td>
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</tbody>
</table>

Description of Courses

Speech Pathology

SPPA. 200. *Introduction to Speech and Language Disorders*, 3 credits.

An introduction to the field of speech pathology. Consideration is given to the cause and treatment of communication disorders in children and adults.


An introduction to phonetic theories relating to Speech Pathology. Instruction in the various transcription techniques for phonetic and phonemic analysis of speech production is provided. (Formerly SpPa. 221.)

318 *Speech Pathology and Audiology*
SPPA. 214. Speech and Language Disorders in the School Aged Child, 3 credits.
Study of articulation disorders, delayed language development and other communication problems frequently encountered in school aged children. Emphasis on remedial techniques. Instruction in the organization and administration of public school speech therapy programs is included. Prerequisites: SpPa. 200, 207.

SPPA. 208. Speech Science II: Anatomy and Physiology of the Ear and Voice Mechanism, 3 credits.
A detailed study of the anatomy and physiology of the speech and hearing mechanisms. (Formerly SpPa. 220.)

SPPA. 300. Children's Language, 3 credits.
The study of language acquisition, development, structure, and function in exceptional children. Prerequisite: SpPa. 200 or permission of instructor.

SPPA. 301. Audiology, 3 credits.
An introduction to the symptoms, causes, and treatment of hearing disorders. Hearing test instrumentation and interpretation in clinical situations is emphasized.

SPPA. 302. Laboratory Experience in Audiology, 1 credit.
Laboratory experience designed to complement the didactic material presented in SpPa. 301, Audiology. Must be taken concurrently with SpPa. 301.

SPPA. 315. Clinical Procedures I, 3 credits.
Clinical procedures in the areas of general diagnostics, assessment and remediation of stuttering and aphasia are emphasized. Prerequisite: SpPa. 214.

SPPA. 316. Clinical Procedures II, 3 credits.
Clinical procedures, evaluative and remedial, in the areas of cleft palate, cerebral palsy, and voice disorders are emphasized. Prerequisite: SpPa. 208, 214.

SPPA. 318. Aural Rehabilitation, 3 credits.
Concentrated attention is given to communication problems of the hearing handicapped. Aural rehabilitation is emphasized, including lip reading and auditory training. Prerequisite: SpPa. 301.

SPPA. 360. Methods and Observation in Speech Pathology, 3 credits.
Clinical observation of speech and hearing therapy. Study of observational techniques, therapy methods and materials, clinical instrumentation, lesson planning and report writing. Prerequisite: SpPa. 214. (Formerly SpPa. 260.)

SPPA. 370. Clinical Practice in Speech Pathology, 3 credits.
Clinical practice in the diagnosis and rehabilitation of children with communication handicaps. Individual supervision is maintained. Prerequisite: SpPa. 360 or permission of instructor.

SPPA. 490. Special Studies in Speech Pathology, 3 credits each semester.
Designed to allow the student to do independent research under faculty supervision. Prerequisite: Permission of Department Head.

SPPA. 499. Honors, 6 credits.
See catalog descriptions entitled, "Graduation with Distinction," and "Graduation with Honors."

Speech Pathology and Audiology 319
SPPA. 501. *Workshops in Speech Pathology* (Summer), 1-3 credits.
Designed to provide a detailed study of a topic of interest in speech pathology.

SPPA. 503. *Seminar in Speech Pathology*, 3 credits.
A study of the current trends and issues in speech pathology. *Prerequisites: SpPa 214 and permission of instructor.*

SPPA. 505. *Introduction to Communication Disorders*, 3 credits.
An introduction to the prevalent types of communications disorders with emphasis in the development of speech and language. A study of the etiologies and characteristics of certain communicative impairments, as well as selected classroom and clinical remedial procedures.

A study of the techniques used to assess auditory function and identify aural and neural disorders. The focus of the course is upon the interpretation of audiometric findings relevant to medical implications and communicological significance.

SPPA. 540. *Language Disorders*, 3 credits.
A comprehensive study of the etiology and remediation of language disorders in communicatively-impaired children. Specific diagnostic procedures and remedial models will be included in relation to delayed language development resulting from mental retardation and learning disabilities.

SPPA. 570. *Selected Clinical Practice in Speech Pathology*, 3 credits.
Supervised clinical practice with selected types of communication disorders. Areas of concentration will be determined on the basis of student need. Repeatable for credit. *Prerequisite: SpPa. 370 and/or permission of the instructor.*

**Hearing Disorders**

HEDO. 505. *Introduction to Hearing Disorders*, 3 credits.
An overview of etiologies and diagnosis of hearing impairment, parent guidance, amplification systems, psychoacoustics speech and language development, oralism, total communication and educational consideration. *Prerequisite: SpPa. 301.*

HEDO. 510. *Hearing Aids and Amplification Systems*, 3 credits.
A study of hearing aids and group amplification systems. Topic areas include electronic components, electro-acoustic characteristics, hearing aid selection, hearing aid fitting, hearing aid orientation, classroom amplification systems, and troubleshooting.

HEDO. 520. *Sign Language and Total Communication*, 3 credits.
Introduction to American Sign Language and total communication. *Prerequisite: SpPa. 318 or permission of instructor.*
MILITARY SCIENCE

The Department of Military Science provides instruction to enable the student to understand the U.S. Army, its functions and missions, and its interrelationships with American society. Students who desire to participate in Military Science courses will receive academic credit applicable towards graduation upon successful completion of the courses. Those physically qualified who also desire to participate in the Reserve Officer Training Program (ROTC) may earn a commission as a second lieutenant in the United States Army. Those electing the ROTC program receive academic credit and are eligible for financial assistance provided by the Army. Students enrolled in advanced military science earn a monthly stipend of $100.00. Additional information may be obtained through the department, Room 115, Maury Hall.

Description of Courses

Military Science

MISC. 001. Leadership Laboratory (0,2), 0 credits.

A laboratory in leadership development stressing the application of leadership principles, responsibilities of the leader and affording experience through practical exercises.

MISC. 102 (PE. 152). Introduction to Orienteering, 2 credits.

This course introduces the student to the sport of orienteering. It provides an opportunity to gain an understanding of map and compass use, and enhances the student’s enjoyment of the out-of-doors. It is being offered as a joint course with the Physical and Health Education Department.

MISC. 110. Military in Society, 2 credits.

Surveys several disciplines relating military structure and function to contemporary society. Films, lectures, and guest speakers are employed to bring the military establishment into perspective.

MISC. 220. The Art of Military Leadership, 2 credits.

Psychological, physiological, sociological and environmental factors which affect human behavior are examined. Military individuals, small group, and large group leadership problems are addressed. The position of the United States in the modern world is discussed in light of its impact on leadership and management problems in military service.

MISC. 310. Theory and Techniques I, 2 credits.

An advanced Military Science course which surveys the theory and techniques of U.S. Army instruction, leadership, and land navigation. Management of personnel and material resources are stressed as techniques toward accomplishment of assigned tasks.

MISC. 320. Theory and Techniques II, 2 credits.

An advanced Military Science course which exposes the student to theory and techniques in the employment of tactical military elements, as well as the use of military communications methods and systems.
MISC. 410. Seminar on Command Management, 2 credits.

An advanced Military Science offering which exposes the student to military management and large unit administration. The military justice system is addressed from a philosophical, historical, and practical base.

MISC. 420. Seminar on Military Team, 2 credits.

Includes the study of combat operations and the various military teams and the coordination and planning necessary between elements. Also included during the seminar is a practicum on organization theory and management principles, objectives, policies, decision-making authority, executive development, leadership communication, attitude and effective human relations. Emphasis is placed during one segment on the practical problems of drug abuse and race relations.
Tuition and Financial Information

Student Financial Aid:

Tuition and fees are billed on a semester basis. Several financial aid options are available to help students pay for their education. Students are encouraged to apply for financial aid as soon as possible. The deadlines for financial aid applications are:

- Fall Semester: April 1
- Spring Semester: October 1
- Summer Semester: March 1

Students must complete the Free Application for Federal Student Aid (FAFSA) or equivalent to be considered for financial aid. Aid is awarded on a first-come, first-served basis, so students are encouraged to apply as early as possible.

Tuition Information:

Semester Tuition and Fees:

- Full-time tuition: $2,000 per semester
- Part-time tuition: $500 per semester

The semester fee for part-time students taking private instruction will be $50 for each lesson a week and $75 for two lessons a week.

Discounts for Credits Earned:

- Additional credits (beyond the normal 15 credits) are available at a reduced rate of $150 per credit.
- Full-time students are charged $1,000 per semester for 15 credits.
- Part-time students are charged $250 per semester for 5 credits.

Specialized Class Fees:

Additional fees may apply for specialized classes, such as music, art, or athletic programs. These fees are determined by the specific class and are subject to change at the discretion of the Administration.

Credit Fee:

A credit fee of $20 is charged per semester for each student. This fee covers the administrative costs associated with maintaining student records.

If you have any questions regarding tuition or financial aid, please contact the Student Financial Aid Office at 555-1234.
TUITION AND FEES

Listed below are the tuition and fees for undergraduate students which must be paid before registration can be completed at James Madison University. The tuition and fees listed are applied toward the general maintenance and operating costs of the university, the costs of instruction, and other general university services including recreational and health service facilities. The fees shown include $15.00 per semester for student activities. This amount is set aside for support of Student Government, Campus Program Board, Student Publications, and other activities as determined by the Student Government Association.

The University reserves the right to adjust these tuition and fee charges because of rising costs or other conditions, if deemed advisable by the Board of Visitors. The amounts listed do not include the cost of books and supplies.

SEMMESTER TUITION AND FEES

<table>
<thead>
<tr>
<th></th>
<th>Virginia Residents</th>
<th>Non Residents</th>
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</thead>
<tbody>
<tr>
<td>Full-Time Students</td>
<td>$400.00</td>
<td>$650.00</td>
</tr>
<tr>
<td>Part-Time Students (10-11 credit hours)</td>
<td>327.00</td>
<td>515.00</td>
</tr>
<tr>
<td>Part-Time Students (7-9 credit hours)</td>
<td>226.00</td>
<td>380.00</td>
</tr>
<tr>
<td>Part-Time Students (4-6 credit hours)</td>
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<td>212.00</td>
</tr>
<tr>
<td>Part-Time Students (1-3 credit hours)</td>
<td>55.00</td>
<td>107.00</td>
</tr>
</tbody>
</table>

ROOM, BOARD AND LAUNDRY

Only full-time students (those enrolled for 12 or more semester hour credits) are permitted to purchase a room, board and laundry contract. All students residing in University Housing, except for those in the Showalter or Chandler Apartments, will be charged $713.00 for room, board, and laundry. Students residing in the Showalter or Chandler Apartments will be billed without board but may purchase a boarding contract for $309.00 each semester.

SUMMARY OF CHARGES FOR FULL-TIME STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Per Semester</th>
<th>Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Day Student</td>
<td>$ 400.00</td>
<td>$ 800.00</td>
</tr>
<tr>
<td>Virginia Boarding Student</td>
<td>1,113.00</td>
<td>2,226.00</td>
</tr>
<tr>
<td>Non-Virginia Day Student</td>
<td>650.00</td>
<td>1,300.00</td>
</tr>
<tr>
<td>Non-Virginia Boarding Student</td>
<td>1,363.00</td>
<td>2,726.00</td>
</tr>
</tbody>
</table>

324  Tuition and Fees
**Student Teaching:** Student teachers will be considered to be full-time students subject to full-time fees while on practice teaching assignments.

**Auditor’s Fees:** A person who registers as an auditor will pay the same Tuition and Fees as one who registers for credit.

**Music Fees:** The fees for full-time students will be as follows: Private instruction in voice, keyboard, string, wind and percussion instruments:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Practice</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 lessons each week per semester</td>
<td>55.00</td>
<td>15.00</td>
</tr>
<tr>
<td>1 lesson each week per semester</td>
<td>33.00</td>
<td>12.00</td>
</tr>
<tr>
<td>1 to 15 lessons per semester, each</td>
<td>2.25</td>
<td>.75</td>
</tr>
</tbody>
</table>

The number of lessons each student wishes to take will be arranged with instructors at the time of registration.

A general fee of $10.00 per semester is charged music students who register only for private instruction and are qualified and desire college credits for such courses.

The semester fee for part-time students taking private instruction will be $45.00 for one lesson a week and $90.00 for two lessons a week.

**Specialized Class Fees:** Additional charges for photography, bowling, riding, golf, and any other classes requiring use of off campus facilities, will be determined at the time the course is offered and a bill will be rendered by the Treasurer after registration.

**Course or Schedule Adjustment Fee:** A fee of $5.00 is required for any adjustment made after the “no fee” schedule adjustment period as specified in the University Catalog. The $5.00 fee must be paid unless the change is necessitated by circumstances beyond the student’s control and the fee is waived by the Dean of Admissions and Records.

**Late Registration Fee:** A $5.00 fee must be paid for registration on days other than those specified in the University Calendar.

**Examination for Credit Fee:** Arrangements for attempting credit by departmental examination may be made by paying a non-refundable $15.00 fee to the Cashier and presenting the receipt to the Records Office.
Diploma Fees: The diploma fee is $15.00 for a Bachelor’s or a Master’s.

Non-Virginia Residents' Fee: Section 23-7 of the Code of Virginia provides that “no person shall be entitled to the admission privileges, or the reduced tuition charges, or any other privileges accorded only to domiciliaries, residents or citizens of Virginia, in the State institutions of higher learning unless such person is and has been domiciled in Virginia for a period of at least one year prior to the commencement of the term, semester or quarter for which any such privilege or reduced tuition charge is sought, provided that the governing boards of such institutions may set up additional requirements for admitting students.”

Parking Fees: A registration and parking fee will be paid by each student who operates a vehicle on campus. The purpose of this fee is to defray the expense of registering vehicles and maintaining parking facilities. Payment must be made at registration.

Application Fee: An initial non-recurring, non-refundable application fee which will not be credited to the student’s account is required. This fee is $15.00 for degree seeking students and $10.00 for non-degree students.

Readmission Fee: A readmission fee of $10.00 is required of all students each year. Currently enrolled students intending to return must submit this fee with their “Application for Readmission” card by mail or at the Cashier’s window by April 1st. This fee will not be refunded, credited to the student’s account, or transferred to another school year.

Room Deposit: Students who desire to live in University residential facilities must make a deposit of $100.00 to reserve a room. This deposit is to be made by April 1st and is non-refundable after May 1st except for reasons stated below. This deposit will be credited to the student’s account within the same school year for which the reservation is requested. A signed Room and Board contract must accompany this deposit. Refund after May 1st will only be made for personal illness certified by a physician, for unavoidable emergency, or other extenuating circumstances approved by the Vice President for Business Affairs.

Medical and Health Services: The James Madison University Health Center provides health and medical services for all students enrolled for 7 or more credit hours. This service includes the furnishing of simple remedies and ordinary nurse’s and physician’s attendance. It will not cover the cost for the student of specially compounded prescriptions, special private nursing, hospital care in serious and protracted cases, surgical operations, or the service of specialists not on our staff.
The fee for the Medical and Health Services is included in the tuition and fees.

**Payment of Tuition and Fees**

All tuition and fees are to be paid prior to the beginning of each session. A "Permit to Register" will be included with each student’s registration materials and must be presented in order to enter the Registration Center. This permit will be issued to those students whose bills are paid in full, who are prepared to pay in full at registration, or who have University approved financial aid for any unpaid balance.

With the use of this "Permit to Register," the student certifies that he/she has paid his/her bill in full prior to date of registration, or is prepared to pay in full at the Registration Center, before registration is completed, or that they have University approved financial aid for any unpaid balance.

No student having unpaid fees or fines due for a previous session will be permitted to register until they are paid in full.

**Debts Owed to the University:** Any unpaid bills are subject to the following regulations enacted by the Board of Visitors of James Madison University which require (1) that no credit for college work may be given to any student for a diploma, or a teacher's certificate, or for transfer purposes, until all debts to the University, other than student loans, have been paid; (2) that students will not be eligible for readmission unless accounts are paid in full for the current session; and (3) that upon recommendation of the Vice President for Business Affairs and with the approval of the Vice President for Academic Affairs, students who are deficient in their accounts may be restricted from attending classes until satisfactory arrangements have been made for payment of their past due obligations to the University.

**Refunds**

The room deposit for dormitory students will not be refunded after May 1st except for illness certified by a physician or for unavoidable emergency or extenuating circumstances approved by the Vice President for Business Affairs.

All refunds are calculated from the date on which withdrawal is officially approved by the Vice President for Student Affairs.

Students who formally withdraw from the University before September 8th for the Fall session and January 19th for the Spring session will be refunded all tuition and fees except a withdrawal fee of $15.00. Board fees will be pro-rated from the Dining Hall opening date. **Room fees will not be refunded.** (Further information on withdrawal from the University may be found on pp. 48.)
Students changing status from full-time to part-time within these dates will only be charged the fees applicable to the remaining credit hours being carried.

Virginia resident students withdrawing or changing status between September 8th and October 19th and between January 19th and March 3rd will be refunded at the rate of $8.00 per credit hour with a maximum refund of $120.00 plus a pro-rata share of the board fee. Non-Virginia resident students withdrawing or changing status between these dates will be refunded at the rate of $16.50 per credit hour with a maximum refund of $247.50 plus a pro-rata share of the board fee. After October 19th and March 3rd, refunds will be only for a pro-rata share of the board fee.

Students who withdraw due to illness certified by a physician or for unavoidable emergency or extenuating circumstances approved by the Vice President for Business Affairs will be refunded a pro-rata share of all fees. The dates for determining pro-rata refunds of board will be those stated in the University Calendar for the opening of the Dining Hall.

Enforced Withdrawal: Students whose connection with the University terminates because of disciplinary action or enforced withdrawal will receive a pro-rata refund of all fees except for room.

Late Entrance and Absences: No adjustment in the charge for room and board will be made for late entrances of ten days or less or for absences of less than fourteen days, except in case of hospital confinement where adjustment is made for absences of seven days or longer.

CAMPUS BANKING FACILITY

The Virginia National Bank operates a branch bank on the campus which provides full-banking service. The University urges students to make use of this service rather than to risk the loss of funds.
SCHOLARSHIPS, GRANTS, STUDENT EMPLOYMENT AND LOANS

The University endeavors to assist capable students in financing their college education. We feel that funds expended for this purpose do much to improve the quality of living. We need more investments of this nature and it is heartening each year to note the increased number of scholarships becoming available to able students through gifts from individuals and from worthy scholarship projects of local community organizations.

As the sources of financial aid increase, the University Financial Aid Office will help students work out "package financial plans" that may include a scholarship, employment and a loan combined to make it possible for a qualified student with low income to attend college.

A student is eligible to apply for financial assistance if he/she is degree seeking and in Good Standing. Good Standing is defined as eligible to enroll in course work at the University. Priority is given to students with a cumulative grade point average of 2.000 or higher.

Since the demand for scholarship, employment and loan assistance at James Madison University is generally competitive, it is essential that ALL APPLICANTS FILE THEIR APPLICATIONS FOR ANY FINANCIAL AID BEFORE THE APRIL FIRST DEADLINE. A STUDENT WHO RECEIVES FINANCIAL AID FOR ONE YEAR MUST REAPPLY FOR EACH SUCCEEDING YEAR TO BE CONSIDERED FOR AID.

APPLICATION PROCEDURE FOR FINANCIAL AID

All applicants for financial aid (including work programs) must submit a formal application for this aid. Applications are available from the Office of Financial Aid. Requests for these applications should be made by entering freshmen on their admission application, and by so doing all application materials will automatically be sent upon acceptance to the University.

Upperclassmen should come by the Office of Financial Aid to obtain application materials.

All applicants for the College Work Study Program, General Undergraduate Scholarship, Supplemental Educational Opportunity Grant, and National Direct Student Loan must submit, in addition to the James Madison University Application for Financial Assistance, the Parents’ Confidential Statement or Financial Aid Form of the College...
Scholarship Service. These forms should be obtained from the high school guidance offices for incoming freshmen and the Office of Financial Aid for currently enrolled students. THE 10 HOUR SERVICE (INCLUSIVE OF FOOD SERVICE) DOES NOT REQUIRE THIS FINANCIAL STATEMENT.

Although financial assistance is awarded for one year, James Madison University will continue to assist aid recipients if need continues and a student maintains good standing. RECIPIENTS MUST APPLY FOR RENEWAL EACH YEAR. APPLICATIONS AND FINANCIAL STATEMENTS MUST BE ON FILE BY APRIL 1.

THE PARENTS’ CONFIDENTIAL STATEMENT OR FINANCIAL AID FORM SHOULD BE MAILED TO THE ADDRESS AS INDICATED ON THE FORM IN ADVANCE OF THE APRIL FIRST DEADLINE.

The amount of financial assistance students may receive depends upon their needs—taking into account their financial resources, those of their parents, and the cost of attending the college of their choice.

Students who are awarded any type of financial assistance by James Madison University shall receive an award letter indicating the source(s) of assistance and amount(s). The Award letter has explanatory information which is very important to the recipient and should be read carefully before the student returns the appropriate copies to the Financial Aid Office. The Office of Financial Aid endeavors to have award letters to recipients by early spring.

The Financial Aid Office makes financial assistance awards for an academic year (fall-spring) and therefore, awards are only made for the second semester (spring term) if additional funds become available.

STUDENTS WHO ARE INTERESTED IN ADDITIONAL INFORMATION ON FINANCIAL ASSISTANCE PROGRAMS SHOULD CONTACT THE OFFICE OF FINANCIAL AID FOR A DETAILED BROCHURE ON CURRENT AID PROGRAMS.

ADDRESS: OFFICE OF FINANCIAL AID
James Madison University
Harrisonburg, Virginia 22801

TELEPHONE: Area Code 703
        433-6644

GENERAL SCHOLARSHIPS

General Undergraduate Scholarship (G.U.S.):
These scholarships are awarded as outright grants and will average between $300.00 and $350.00, depending upon the need of the applicant.
To be eligible a recipient shall be a legal resident of Virginia and have an established record of personal character and citizenship. He/she must also be enrolled in or accepted for admission to a regular FULL-TIME program of study leading to a baccalaureate degree at a four-year state-controlled institution and demonstrate that financial assistance is needed to attend college. Student must have a cumulative grade point average of 2.500 on a 4.000 scale.

Each scholarship is awarded for one academic year and is renewable for succeeding years only upon continuing eligibility and availability of funds. The scholarship award shall be CREDITED TO THE STUDENT'S ACCOUNT ON THE BASIS OF ONE-HALF OF THE SCHOLARSHIP TO EACH SEMESTER. Participating institutions shall require each scholarship holder to sign an agreement to repay any unused portions of the scholarship in the event of his/her withdrawal from college for other than extenuating circumstances.

Supplemental Educational Opportunity Grant (S.E.O.G.):

This is a program of direct awards to undergraduate students. James Madison University will award a number of these grants to students with exceptional financial needs who require them to attend college. To be eligible, the student must also show academic or creative promise.

Eligible students who are accepted for enrollment on at least a part-time basis or who are currently enrolled part-time and in good standing, may apply for Supplemental Educational Opportunity Grants for each year of their higher education, although the maximum duration of a grant is four years. Priority is given to full-time students.

Grants will range from $200.00 to $1500.00 a year and can be no more than one-half of the total assistance given to the student. A student is limited to a maximum of $4000.00 in a four year period. This grant must be matched dollar for dollar with some other type of assistance. This grant shall be CREDITED TO THE STUDENT'S ACCOUNT ON THE BASIS OF ONE-HALF OF THE SCHOLARSHIP TO EACH SEMESTER.

Basic Educational Opportunity Grant (B.E.O.G.):

This grant, more commonly known as Basic Opportunity Grant, is a program of student financial aid which was authorized by Title IV, Part A of the Education Amendments of 1972. In order for a student to receive a Basic Grant, he/she must have been accepted for enrollment in or be in good standing at an eligible institution of higher education. Students must be enrolled half-time or full-time in an undergraduate course of study and be U.S. citizens. SPECIAL APPLICATION FORMS FOR THIS PROGRAM MAY BE OBTAINED FROM THE...
UNIVERSITY OR YOUR HIGH SCHOOL. Student recipients shall either receive credit to their account or payment by check for this grant.

Virginia College Scholarship Assistance Program (C.S.A.P.):

The College Scholarship Assistance Program provides need-based grants and loans to Virginia undergraduate students enrolled in Virginia public and private institutions of higher education. The program’s purpose is to serve as one means of guaranteeing that financial conditions will not prevent the Commonwealth’s college-age students from gaining access to higher education.

All Virginia students who will be enrolled in participating institutions as full-time undergraduates who have been Virginia domiciliary residents for at least one year and who demonstrate sufficient financial need are eligible to apply for the C.S.A.P. award. Institutional participation is determined on the following basis: state-supported colleges or universities which are accredited and private colleges and universities which are accredited and non-profit and whose main purpose is to provide collegiate or graduate education and not to provide religious training or theological education are eligible to participate in the program.

Since financial need is the major criterion of this program, funds will not be available to students who do not demonstrate sufficient relative need, as determined by the State Council of Higher Education, the administering agency. Further, since funds are necessarily limited, the size of any individual award will likely be proportionate to the demonstrated need of all other students who apply.

Applicants must file a Parents’ Confidential Statement (PCS) or a Financial Aid Form (FAF) as appropriate.

Applications for this program may be obtained from the high school or Office of Financial Aid. The application should be submitted directly to the State Council of Higher Education according to instructions on the application.

The Parents’ Confidential Statement or Financial Aid Form must be mailed to Princeton for processing and student must indicate on the appropriate form that a copy is to be sent to the State Council of Higher Education (0068). No application will be considered complete until the State Council has received this statement from the College Scholarship Service.

PRIVately FUNDED SCHOLARSHIPS

All scholarships that are funded by organizations or individuals shall establish with the Vice President of Public Affairs a fund for the particular scholarship. The awarding of the scholarship shall be made
through the Financial Aid Office. If organizations or individuals wish to
discuss procedures for awarding a particular scholarship, they are en-
couraged to contact the Financial Aid Office.

**Agness S. Dingledine Memorial Scholarship:** This scholarship was estab-
lished in 1974 in memory of Mrs. Agness S. Dingledine who served the
College in many capacities, including faculty member, housemother,
sponsor of Sigma, Sigma, Sigma, and Alumni Secretary. This annual
scholarship is awarded to a deserving undergraduate student. The se-
lection of the recipient is made by the Director of Financial Aid. To
apply for this scholarship, check the appropriate section on the finan-
cial aid application.

**The Duke Memorial Scholarship:** This scholarship has been established
in memory of the late Samuel Page Duke, who served so ably as Presi-
dent of Madison College from 1919–1949. This scholarship is provided
from funds by each senior class and is awarded annually to the member
of the junior class who has the highest scholastic record for five semes-
ters while a student at James Madison University and it is available for
the senior year.

**The Lucy Copenhaver Gunter Memorial Scholarship:** This scholarship
has been established by Dr. Benjamin F. Gunter of Nashville, Tenne-
see, as a memorial to his late wife, Lucy Copenhaver Gunter, a gradu-
ate of Madison College of the Class of 1932. It is supported by a gift
from him to the Madison College Foundation, which will invest the
principal of the fund and use the annual income for this scholarship. To
apply for this scholarship, check the appropriate section on the applica-
tion for financial aid.

**Minnie Christiansen-Margaret Miner Scholarship:** This is a scholarship
which has been established in honor of Minnie Christiansen and Marga-
ret Miner and is awarded annually to a student majoring in Home Eco-
nomics. Selection of a recipient for the scholarship will be made by a
committee appointed by the President and consisting of members of
the Home Economics Department, Home Economics Alumni, and
Home Economics Students. Applications for the scholarship should be
obtained from and submitted to the Home Economics Department.

**Jane McCauley Partlow Memorial Scholarship:** This scholarship was es-
tablished in 1972 by donations to the Madison College Foundation in
memory of Mrs. Jane McCauley Partlow. This scholarship will be
awarded annually. To apply for this scholarship, check the appropriate
section on the application for financial aid.

**The Edna T. Shaeffer and Glee Club Scholarship:** This fund has been
established as a memorial to Miss Schaeffer, who served in the Madi-
son Music Department and as Director of the College Glee Club for for-
ty-one years, and to all former members of the Madison Glee Club. The
award is presented to a music student, preferably a child of a former Glee Club member. Applications may be obtained from the Music Department.

The Varner-Winn Scholarship: This scholarship, created by the Panhellenic Council in appreciation of the years of leadership and service given to the Greek Letter Community of Madison College by Mrs. Varner and Miss Winn is awarded to an active sorority woman with the following qualifications: Any active, initiated sorority girl on the campus of James Madison University, enrolled full-time with an overall cumulative average of 2.75. Financial need is also a criteria. Applications are available through any sorority scholarship chairman.

The Elsie H. Wigley Memorial Scholarship Fund: This scholarship, for a student teacher in Early Childhood Education, is established by friends and family in memory of Miss Elsie H. Wigley, who served as supervisor of kindergarten student teachers for Madison College from 1943 to 1969. The annual award of $250.00 will be made to an outstanding senior student in Early Childhood Education for use during the student teaching period. This student will be selected on the basis of professional criteria, including above average scholarship. Both men and women are eligible. Recommendations and applications should be submitted during the junior year, before April 1, to the Office of Financial Aid.

Planters Bank Scholarship Fund: This annual scholarship in the amount of $250.00 shall be awarded to a student from Augusta or Rockingham County who excels in academic and leadership ability. This scholarship is available every other year. To apply for this scholarship, check the appropriate section on the application for financial aid.

Katherine M. Ikenberry Memorial Scholarship: This scholarship was established in 1973 in memory of Mrs. Ikenberry who served Madison College from 1963–1971 as an assistant professor of English. This annual scholarship shall be awarded to a deserving undergraduate student who shows academic promise. The selection of the recipient shall be made by the Director of Financial Aid. To apply for this scholarship, check the appropriate section on the application for financial aid.

Special Talents and Leadership Scholarship: Several scholarships are awarded each year to undergraduate students who have demonstrated the potential for exceptional non-academic contributions to the betterment and recognition of James Madison University and the Commonwealth of Virginia. Recipients are selected from recommendations submitted to the scholarship committee by faculty, staff, and alumni.

ALUMNI SCHOLARS PROGRAM

The Alumni Association has made available academic scholarships that will be awarded solely on academic merit. The Alumni
Scholars Committee will review applications for admission and select students who best qualify.

The scholarship recipients will be notified of their selection in early spring.

The scholarships will be valued at $500 each. The recipients will be identified as Alumni Scholars and will be eligible to receive the scholarship each year they are enrolled at the University as long as they maintain a high academic record as determined by the Alumni Scholarship Committee.

STUDENT EMPLOYMENT

Students who are employed to work on the campus either under the 10 hour work program or the College Work Study Program shall receive payment by check for their services once a month. NO CREDIT FOR CAMPUS EMPLOYMENT IS EVER APPLIED TO A STUDENT'S ACCOUNT.

Food Service: James Madison University students are employed to assist in a variety of jobs in food service on campus. Employment is available in Gibbons Dining Hall, the Duke's Grill located in the Warren Campus Center, and to assist with special events such as banquets.

The meals in Gibbons Dining Hall are served cafeteria style. It requires approximately 200 student employees to operate this food service facility. Students may be employed as waiters or waitresses, dishwashers, cook's aids, etc. Students are supervised directly by student supervisors and managers in the different work areas. These supervisory positions are filled from the ranks of student employees and are compensated accordingly for their responsibilities.

Students who are assigned to food service are selected on the basis of date of applications and personal qualifications with particular emphasis on past food service experience. The employment assignment is awarded on a yearly basis and is renewable upon reapplication and approval by the Food Service Director and the Director of Financial Aid. Students who do not have boarding contracts are ineligible for employment in the dining hall, but may work in the Duke's Grill.

Ten Hour Service: Students, both freshmen and upperclassmen, who are assigned to these work positions serve as assistants in the library, administrative offices, laboratories, post office and gymnasium. The students work 10 hours per week and the positions are renewable each year upon re-application and approval by the supervisor and the Director of Financial Aid. The positions are awarded upon the basis of date of application and personal qualifications.
College Work-Study: A federal supported program of employment for students, especially those from low-income families who need a job to help pay for college expenses. Eligible students may work up to 15 hours a week while attending classes at least part-time. On-campus jobs include work in laboratories, Godwin Hall, post office, in addition to secretarial positions for the faculty and administration. To work under this program, a student must be enrolled and be in good standing, or be accepted for enrollment as a part-time student at James Madison University. The student’s eligibility depends upon his/her need for employment to defray college expenses and his/her academic promise with preference given to applicants from low-income families. The work-study assignments are renewable each year contingent upon need and an acceptable grade average. Priority for these positions is given to full-time students.

James Madison University participates in the VIRGINIA PLAN, a program which allows students to be employed during the summer under the COLLEGE WORK STUDY PROGRAM in off-campus jobs. Students are assigned to qualified organizations or institutions participating in this program. Application forms may be obtained from the Office of Financial Aid, during February of each academic year. The Parents' Confidential Statement or Financial Aid Form is also required for this program.

Part-time Off-campus Employment

Information concerning off-campus part-time employment is available in the Student Employment Office located on the first floor of the Warren Campus Center.

STUDENT LOANS

National Direct Student Loans: This is a program of borrowing. James Madison University has participated in the National Direct Student Loan Program since July, 1972. Freshmen who have been accepted for enrollment or upperclassmen with acceptable academic averages who are enrolled in full-time or at least half-time courses at the University and who need financial aid for educational expenses are eligible for National Direct Student Loans. Priority is given to full-time student borrowers.

An undergraduate student may borrow up to $2,500.00 through the sophomore year and to a total of $5,000.00 for undergraduate studies. Graduate students may borrow as much as $2,500.00 per year to a maximum of $10,000.00. The repayment period and the interest do not begin until nine months after the student ends his/her studies. The loans bear interest at the rate of 3 per cent per year and repayment of principal may be extended over a ten-year period, except that the institution may require a repayment of no less than $30.00 per month plus interest.
Frances Sale Loan Fund: This fund was established in memory of Frances Sale, the first Home Economics Department Head. It is available to home economics majors. The money was provided by the Frances Sale Home Economics Club. Applications should be obtained from the Home Economics Department.

STATE EDUCATION ASSISTANCE AUTHORITY—GUARANTEED LOANS—VIRGINIA RESIDENTS

The State Education Assistance Authority is a State agency, organized under an Act of the General Assembly of Virginia in 1960. Its purpose is to help young men and women of Virginia who need to borrow funds in order to obtain a higher education.

The Authority, through participation agreements with Lending Institutions of the State, enables these institutions to make long term personal loans to students to help pay their college expenses.

Eligibility

Any person who (1) is a resident of Virginia, and (2) is accepted for enrollment or is a full-time student in good standing at an institution of higher learning in Virginia. There are no restrictions as to courses or classes. Undergraduates, graduates, and students taking professional courses are eligible. Part-time students are not eligible. Also eligible are residents of Virginia attending certain out-of-state institutions to become veterinarians.

APPLICATIONS AND APPLICATION INFORMATION SHOULD BE OBTAINED DIRECTLY FROM YOUR COMMERCIAL LENDING INSTITUTION (Bank, Savings and Loan, Credit Union.)

STATE EDUCATION ASSISTANCE AUTHORITY (Non-Virginia Residents): This Authority enables commercial banks in most states to make loans to resident students to help pay their college expenses. Students who are in satisfactory standing at an institution of higher learning may apply for such loans. APPLICATIONS AND APPLICATION INFORMATION SHOULD BE OBTAINED DIRECTLY FROM YOUR COMMERCIAL LENDING INSTITUTIONS (Bank, Savings and Loan, Credit Union.)

A Suggestion to Friends of the University

The scholarship and loan funds have been a very great assistance to many worthy students, and it is hoped that other friends of education will continue to provide financial assistance for students of this in-

Scholarships, Grants, Student Employment and Loans 337
stitution. This should appeal to industries and other business establishments, and to persons of means as a most worthy manner in which to invest money and reap a manifold return in the influence which an educated person may exert on the rising generation.

Any sum, large or small, contributed to the University for this purpose will be faithfully used and greatly appreciated by the administration, the faculty, and the students. The President of the University will be pleased to confer or correspond with persons interested in establishing endowment or other scholarships for aiding worthy students.
Administration and Faculty
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APPROVALATION OF NON-DISCRIMINATION ON THE BASIS OF SEX

James Madison University does not discriminate on the basis of sex in its educational programs and activities which it operates. James Madison University is required by Title IX of the Education Amendments (PL 92-372) of 1972 and Department of Health, Education, and Welfare regulations to implement Title IX, Prohibition of Sex Discrimination in Educational Programs and Activities Receiving Federal Financial Assistance, to take appropriate steps to ensure that the University does not discriminate on the basis of sex in its educational programs and activities. Any individual who believes that the University has discriminated on the basis of sex should, if possible, contact the Director of the Title IX Coordinator, Wilson Hall, 403 James Madison University, Harrisonburg, Virginia 22807 (Telephone: 434-421-5080) or the Director of the Equal Employment Opportunity Commission. The address of the Equal Employment Opportunity Commission is: 1401 Constitution Avenue, N.W., Washington, D.C. 20507. Further information about Title IX, the regulations, the University's nondiscrimination policy, the University's Title IX Coordinator, and a list of individuals and offices to which complaints may be addressed are available on the University's website or by contacting the University's Title IX Coordinator.
NOTIFICATION OF NON-DISCRIMINATION ON THE BASIS OF SEX

James Madison University does not discriminate on the basis of sex in the educational programs or activities which it operates. James Madison University is required by Title IX of the Education Amendments (PL 92-318) of 1972 and Department of Health, Education and Welfare regulations to implement Title IX, Prohibition of Sex Discrimination in Educational Programs and Activities Receiving Federal Financial Assistance, not to discriminate in such a manner. This requirement not to discriminate in educational programs and activities extends to employment by the University and to admission thereto. Inquiries concerning the application of Title IX and the implementing regulations may be referred to Dr. John P. Mundy, Title IX Coordinator, Wilson Hall, 205, James Madison University, Harrisonburg, Virginia 22801 (telephone 433-6422) or to the Director of the Office of Civil Rights.
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