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Madison College Bulletin, May, 1976

Madison College (Harrisonburg, Va.)

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Directory for Information

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

- Admission: Director of Admissions
- Alumni Affairs: Director of Alumni Services
- Degree Requirements: Dean of the School in which the degree is offered
- Evaluation of Credits: Dean of Admissions and Records
- Evening Courses: Director of Continuing Education
- Extension Courses: Director of Continuing Education
- Financial and Business Affairs: Vice President for Business Affairs
- Graduate Studies: Dean of the Graduate School
- Housing: Director of Housing
- Placement of Graduates: Director of Career Planning and Placement
- Registration: Director of Records
- Scholarships and Loans: Director of Financial Aid
- Summer Session: Dean of Summer School
- Transcripts: Director of Records

The College can be reached by telephone at all times, Harrisonburg (703) 433-6211

Madison College Bulletin
Volume XXXIV, No. 4

Catalog Issue
May, 1976
"The diffusion of knowledge is the only guardian of true liberty."

James Madison
Accreditation

Madison College 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.

It is a member of: American Council on Education, National Commission on Accrediting, American Association of State Colleges and Universities, Association of Virginia Colleges, American Association of Colleges for Teacher Education, The National Association of Schools of Music, The National League of Nursing Baccalaureate and Higher Degree Programs.

and a corporate member of: American Association of University Women.
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COLLEGE CALENDAR 1976-77

Fall Semester, 1976

Aug. 29—Residence Halls open 9:00 a.m. for Returning Students. Dining Hall opens 4:00 p.m.

Aug. 30—Residence Halls open 9:00 a.m. for New Students.

Aug. 30—Registration of Undergraduate and Graduate Students. For detailed dates and times, see Schedule of Classes, Fall Semester, 1976.

Aug. 30—Last day to submit an application for a degree if graduation requirements are to be met in October.

Aug. 31—Registration of Undergraduate Students. For detailed dates and times, see Schedule of Classes, Fall Semester, 1976.

Sept. 1—Classes meet as scheduled.

Sept. 6—Labor Day. Classes meet.

Sept. 8—Last day on which changes in class schedules may be made without payment of $5.00 fee. Last day to add a new course to first semester program.

Sept. 10—Student teachers for third or fourth block, Spring Semester, 1977, must complete the student teaching application.

Sept. 23—Last day to change a first block course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Sept. 29—Last day to submit an application for a degree if graduation requirements are to be met in December.

Oct. 6—Last day to change a semester course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Oct. 7—Last day to drop a first block course.

Oct. 9—Parents’ Day.

Oct. 19—First block courses end.

Oct. 21—Mid-semester grades due in Records Office.

Oct. 21—Classes begin second block courses.

Oct. 23—Homecoming.

Oct. 25—First block course grades due in Records Office.
Nov. 2—College Holiday. (Election Day). Classes (undergraduate and graduate) do not meet.

Nov. 3—Last day on which changes in class schedules for second block courses may be made without payment of $5.00.

Nov. 11—Last day to drop a semester course.

Nov. 12—Last day to change a second block course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Nov. 24—Thanksgiving vacation begins 5:00 p.m. Dining Hall closes 3:00 p.m. Residence Halls close 7:00 p.m.

Nov. 28—Residence Halls open 12:00 Noon. Dining Hall opens 4:00 p.m.

Nov. 29—Thanksgiving vacation ends and classes resume.

Dec. 3—Last day to drop a second block course.

Dec. 10—Last day of classes.

Dec. 10—Last day for students to complete 1976 Spring Semester and 1976 Summer Term "incomplete" grades and for faculty to turn in these grades to the Records Office.

Dec. 11—Reading Day.

Dec. 13-17—Final Examinations.

Dec. 17—Dining Hall closes 3:00 p.m.

Dec. 17—Residence Halls close 7:00 p.m.

Dec. 18—Graduation (no commencement exercise).

Spring Semester, 1977

Jan. 9—Residence Halls open 12:00 Noon. Dining Hall opens 4:00 p.m.

Jan. 10—Registration of Undergraduate and Graduate Students. For detailed dates and times, see Schedule of Classes, Spring Semester, 1977.

Jan. 11—Registration of Undergraduate Students. For detailed dates and times, see Schedule of Classes, Spring Semester, 1977.

Jan. 12—Classes meet as scheduled.
Jan. 19—Last day on which changes in class schedules may be made without payment of $5.00 fee. Last day to add a new course to second semester program.

Jan. 22—Student teachers for first or second block, Fall Semester, 1977, 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.

Feb. 2—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, 1977.

Feb. 16—Last day to change a semester course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Feb. 16—Last day to drop a third block course.

Mar. 1—Third block courses end.

Mar. 4—Mid-semester grades due in Records Office.

Mar. 4—Mid-semester recess begins 5:00 p.m. Dining Hall closes 3:00 p.m. Residence Halls close 7:00 p.m.

Mar. 7—Third block course grades due in Records Office.

Mar. 13—Residence Halls open 12:00 Noon. Dining Hall opens 4:00 p.m.

Mar. 14—Classes resume. Fourth block courses begin.

Mar. 18—Celebration of Founder’s Day (March 14).

Mar. 18-25—The Fine Arts Festival.

Mar. 21—Last day on which changes in class schedules for fourth block courses may be made without payment of $5.00 fee.
Apr. 1—Last day to change a fourth block course from credit/no-credit to letter grade or letter grade to credit/no-credit.

Apr. 1—Last day to drop a semester course.

Apr. 7—Honors Day.

Apr. 15—Last day to drop a fourth block course.

Apr. 29—Last day of classes.

Apr. 29—Last day for students to complete Fall 1976 “incomplete” grades and for faculty to turn in these grades to the Records Office.

Apr. 30—Reading Day.

May 2-6—Final Examinations.

May 7—Graduation. Commencement exercises 10:00 a.m.

May 7—Dining Hall closes 2:00 p.m. Residence Halls close 5:00 p.m.

May Session, 1977

May 8—Residence Halls open 9:00 a.m. Dining Hall opens 4:00 p.m.

May 9—Registration for May Session Only. For detailed dates and times, see Schedule of Classes, Summer Session, 1977.

May 10—Classes meet as scheduled.

May 12—Last day to add a course. Last day to change a course without a $5.00 fee.

May 13—Last day to change a May Session Course from credit/no-credit to letter grade or letter grade to credit/no-credit.

May 20—Last day to drop a course.

May 27—Final Examinations. Dining Hall closes 3:00 p.m.

Summer Session, 1977

First Four-Week Term

June 12—Residence Halls open 9:00 a.m.

Dining Hall opens 4:00 p.m.
June 13—Registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1977.

June 14—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, 1977.

June 16—Last day to add a course for the First Four-Week Term. Last day to change a Four-Week Term course without a $5.00 fee.

June 23—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 30—Last day to drop a Four-Week Term course.

July 4—Holiday. Classes (undergraduate and graduate) do not meet.

July 8—Final Examinations for First Four-Week Term courses.

**Eight-Week Term**

June 12—Residence Halls open 9:00 a.m. Dining Hall opens 4:00 p.m.

June 13—Registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1977.

June 14—Classes meet as scheduled.

June 21—Last day to add a course for the Eight-Week Term. Last day to change an Eight-Week Term course without a $5.00 fee.

June 27—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—Study Day. Classes (undergraduate and graduate) do not meet.

July 12—Last day to drop an Eight-Week Term course.
Aug. 5—Final Examinations. Dining Hall closes 6:00 p.m.
Aug. 6—Residence Halls close 10:00 a.m.

Second Four-Week Term

July 11—Course changes and registration. For detailed dates and times, see Schedule of Classes, Summer Session, 1977.
July 12—Classes meet as scheduled.
July 14—Last day to add a Second Four-Week Term course. Last day to change a Four-Week Term course without a $5.00 fee.
July 19—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 27—Last day to drop a Second Four-Week Term course.

Aug. 5—Final Examinations. Dining Hall closes 6:00 p.m.
Aug. 5—Graduation. Commencement exercises 7:00 p.m.
Aug. 6—Residence Halls close 10:00 a.m.
THE VISITORS OF MADISON COLLEGE

Francis Bell, Jr., Rector
Harrisonburg

Martha S. Grafton, Vice Rector
Staunton

J. E. Bassett, Jr.
Bassett

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
Madison College is located in Harrisonburg, an attractive Virginia town with a diverse and vibrant community. The city is home to several colleges and universities, including Mary Baldwin College and James Madison University. Harrisonburg is located in the Shenandoah Valley, and the surrounding area offers a variety of recreational opportunities, such as hiking, cycling, and skiing. The college is easily accessible by car, and the Amtrak terminal is located just a short drive away.

The College

The name of the college was changed to Madison College in 1969, and the Board of Visitors assumed the name of Madison College. The Board has an Executive Committee that meets quarterly to address major policy issues. The Board meets twice a year, and the chairman of the Board serves as the president of the College. The Board members are appointed by the Governor of Virginia and serve five-year terms. The Board oversees the administration of the college and is responsible for setting policy and making major decisions. The Board is composed of representatives from various communities in the state, and the members are diverse in terms of background and expertise. The Board is committed to ensuring that Madison College remains a leading institution of higher education in Virginia.
INTRODUCTION TO MADISON COLLEGE

Purpose

Madison College is a college of arts and sciences governed by a Board of Visitors. The College 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 Madison College is the development of citizens who can make positive contributions to society. The College is committed to excellence in the intellectual, cultural, social and professional growth of its students. Madison also serves the citizens of the region in which it is located through its instructional, research and public service efforts. The College 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. Madison 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

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

The first president of the College was Julian Ashby Burruss. The College 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 College 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 College’s development, the campus plan was established and six buildings were constructed.

Dr. Samuel Page Duke became the second president of the College in 1919 upon the resignation of Dr. Burruss, who became President of Virginia Polytechnic Institute.

The College 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 College 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 College 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 College 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 College. During his administration, six major College buildings have been constructed. Enrollment at the College has grown under Dr. Carrier’s administration from 4,000 to the 1975-76 enrollment of 7,300 (4,200 women and 3,100 men). The College expects soon to achieve a 50-50 ratio of men and women students.

Location

Madison College 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 College 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 College, 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 College are made by the Board upon the recommendation of the President.

The academic areas of the College 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.

The College has proposed the establishment of two new schools, a School of Communication and a School of Allied Medical Services.

Campus and Buildings

The Madison College campus contains a total of 362 acres, including 31 acres at the College 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 College 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, Chappelear, Hanson, Weaver, Dingledine, Garber, Ikenberry, Shorts, Eagle, White and Chandler.

Chandler Hall serves as a residence hall but also serves as the center for Madison'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 300,000 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.

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.

Maury Hall contains faculty offices and classrooms. It is the oldest building on campus and contains the Department of Special Education, 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 Business Administration. 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 Political Science and Geography, 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 College. It contains offices relating to the Division of Student Affairs.

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 Madison’s four presidents.

Madison College 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 Health and Physical Education Department and the Intercollegiate Athletic Offices. Adjacent to Godwin Hall is Madison Stadium with 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.
Percy H. Warren Campus Center is the center for student activities on campus. It contains a bookstore, cafeteria, post office, recreational rooms and meeting rooms.

Burruss Hall, adjacent to the library, houses the Department of Mathematics, the Department of Biology, and Radio Station WMRA-FM.

Miller Hall, the newest building on campus, houses the Department of Chemistry, the Department of Geology, and the Department of Physics. The building also contains a spacious auditorium and a planetarium.

The Alumni Association

The purpose of the Alumni Association is to keep the College 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 College. An annual fund drive, The Madison Fund, is conducted to seek financial support of Alumni.

The Association keeps a directory of graduates of Madison College, publishes "The Madisonian," holds a special reunion every year in the fall, when all former students are invited to visit the College, and holds a Spring Alumni Day.
STUDENT AFFAIRS

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 a 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 College community.

3. To assist the members of the Madison College 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 College community.

General Information and Assistance

The Office of the Dean of Students 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 college or community agencies.

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

The President of the College has empowered the Dean of Students to serve as Ombudsman. In this role, the Dean may bypass normal administrative procedures while seeking direct solutions to students' problems.

Withdrawal Assistance

The Assistant Dean of Students interviews and advises any student who is considering withdrawal from the College. Together, the student and Assistant Dean discuss the personal, financial, and academic implications of withdrawal. The Office of the Assistant Dean also provides students with the required withdrawal request forms and assists in their completion.

Student Rights, Regulations, and Judicial Procedures

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

Students who are charged with violations of the stated College policies are guaranteed their rights as members of the College 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 College Hearing Officer, while all major violations are heard by the College Judicial Council or the Appellate Hearing Officer. Violations involving academic dishonesty are heard by the Honor Council, which is an integral part of the College’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 policy handbook.

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

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

The student population of the College 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.

Commuter Student Assistance

The Office of The Assistant Dean of Students is responsible for assessing the needs of off-campus students and for coordinating services and programs designed to meet those needs. Any off-campus student having landlord-tenant difficulties, parking problems, or other concerns should contact the Assistant Dean.

Residence Halls

The Office of Residence Halls has three major areas of responsibility: 1) room assignments, 2) residence hall operation and management, and 3) the selection and training of residence hall staff members. Each of these areas of responsibility are carried out in a manner calculated to achieve the primary goal of the Office of Residence Halls, which is to provide a residential living experience which maximizes the educational and developmental growth of each student.

The residence hall system of twenty-five residence halls and seven apartment buildings is administered by a professional staff consisting of the Director of Residence Halls and three Assistant Directors, each of whom is responsible for the supervision of a number of residence halls within a defined geographical area of the campus. All residence hall staff members, both student and professional, are available to advise and assist students and student organizations in any way possible, including the establishment of workshops, non-credit courses, seminars, leadership training, and other activities which contribute to the growth and personal development of Madison students.

The Office of Residence Halls offers seven different “life-style” options within college operated housing so that students may choose a living environment and social regulations which are most compatible with their personal life-styles and value systems. A strong effort is made to comply with student preferences for life-style choices and room assignments.

Each residence hall is staffed with a Head Resident and Resident
Advisors who can assist students in their adjustment to College life. Staff members are carefully selected and trained in leadership development, hall administration, counseling, educational programming, and group advising. The hall staff works closely with the elected hall council in sponsoring a variety of social and educational programs and in providing extra equipment for recreation, cooking, and other special interests of hall residents.

**Student Health**

The College 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 cases 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 college. A report of a medical examination, recorded on forms provided by the College, 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 own decisions and choices and assures his 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 College 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 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 by the student, all information with respect to the student’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. Walk-in service (no appointment necessary) is available Monday through Friday from 3:00-5:00 p.m.

Student Activities

Madison offers excellent opportunities for active and stimulating social and cultural life to all students. Varied programs for students are provided through educational programming in the residence halls, the Campus Program Board, honor societies, departmental and other organizations. The Student Activities Office assists college groups in arranging events and gives guidance to the development of campus organizations.

The Percy H. 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 Chandler Hall Mini-Center provides space for recreation, meetings and banquets as well as a post office and TV lounge. The College 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 Pool Room.

The Campus Program Board arranges activities to develop the individual, broaden his 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. Madison participates in the University Center in Virginia. Through the Center’s Visiting Scholars program, outstanding academic personalities are brought to the campus.

Student Affairs
The College 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, Sigma Sigma Sigma, and Zeta Tau Alpha) operate under the general control of the college administration and local Panhellenic Council. All are members of the National Panhellenic Conference.

Madison College 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 college administration.

Madison College has one national service sorority, Delta Sigma Theta, which is a member of the National Panhellenic Council, and one national service fraternity, Alpha Phi Omega.

Many honorary societies, devoted to encouraging high standards of scholarship, leadership, and professional competence, maintain active chapters on the campus. Madison College 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. Madison has a chapter of Omicron Delta Kappa, the national leadership honor society for college men. 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 Dean of Students’ Office, or the Student Government Association Handbook.

OTHER STUDENT SERVICES

Career Planning and Placement

The College brings its graduates to the attention of prospective employers through the Office of Career Planning and Placement.

Normally, students register for placement assistance during the Spring of their junior year so that their files may be completed in time for campus recruitment beginning in October of their senior year. At the time of registration, they are given instructions and materials for completing a placement file from which the office prepares a set of credentials to be furnished to each campus recruiter for individual interviews. Credentials are mailed to prospective employers upon request.
The Office of Career Planning and Placement also provides services to students of all classifications who are seeking career information and guidance, and to Alumni who may be seeking job changes.

The Career Planning and Placement Office has professional staff members available at all times to assist with placement problems on an individual basis. A continuous campus recruiting program by employers of public schools, business, industry and government is carried out from October through May of each year.

All placement services are intended to supplement the efforts of the individual and are not intended to replace the graduate’s own personal search for 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.
The College of Lake County, located on the shores of Lake Michigan, is
The Office of Career Planning and Placement offers services to students who are seeking employment.

The college provides workshops, career fairs, and other resources to help students find employment opportunities. Students can also receive assistance with job search strategies, resume building, and interviewing skills.

Median Lake County has a strong focus on diversity and inclusion. The college has established partnerships with local organizations to provide opportunities for students from diverse backgrounds.

Other Student Services

Career Planning and Placement

The College offers comprehensive career planning and placement services through the Office of Career Planning and Placement.

Initially, students register for placement assistance during the spring of their junior year so that their files may be completed in time for campus recruitment beginning in October of their senior year. At the time of registration, they are given instructions and materials for completing a placement file from which the office prepares a set of credentials to be furnished to each campus for the individual student. Credentials are mailed to prospective employers upon request.
Academic Information
ADMISSION

Admission to Madison College is competitive. The enrollment for Madison College 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 College 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 College 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 College does not assure continued attendance at succeeding sessions. Students enrolled at the College 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 filled in 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 College 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 College, 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 College is located adjacent to the building.

FRESHMAN STUDENTS

Admission Requirements

The general requirements for admission to Madison College 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 his 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

Madison College stresses sound preparation in the academic disciplines.

The following is a minimum program of studies for students planning to enter Madison College: 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 Madison College 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, Madison College, 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 College 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 College program. Any student who withholds pertinent health or other personal information may be required to withdraw from the College.

**College Board Examinations**

All freshman applicants for admission to Madison College 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, April, 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 College.

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 Madison College. Each case will be considered individually on its merits. Madison College 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 College. 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)

Madison College 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.

Admission 31
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 College.

5. Academic departments may require other evidence of proficiency.

6. Residency and other degree requirements of Madison College 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 Madison College 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 Madison College 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 Madison College 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 Admission along with the application fee of $15.00 to the Director of Admissions, Madison College, 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 Madison College 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 College.

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 Madison College.

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 College. The Head of the Department in which the student is majoring will determine the credits required for graduation within the department.

Residency and other degree requirements of Madison College 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 Madison College in the choice of such courses.

READMISSION

A student who has withdrawn from Madison College for one semester or longer must reapply for readmission through the Office of Admission.
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 Madison, the work there as well as that done at Madison will be taken into consideration.

When a student withdraws during a semester and plans to return the next academic year, he 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 record must be reviewed by the Retention Review Committee before readmission will be considered.

A student who re-enters Madison after an absence of a semester or more returns under the current catalog or the catalog of his 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

Madison College 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 Health 270 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 Madison College, 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 Madison College 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 Madison College under this program must submit the “Application for 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 Madison College 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 registration procedure by the Admissions Office.

Madison College 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 Undergraduate Study

A graduate of an accredited institution taking a limited number of courses and not presently working toward a degree at Madison College
may be admitted as a post-baccalaureate undergraduate student by having his 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 Madison College during a term may be admitted as a term special student by having the registrar of his 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 Madison College 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 has a high school diploma or equivalent, and
   b. If he has had an interruption of at least one year in his 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 Madison College.

2. An individual who has been academically dismissed from another institution because of low academic standing, or who has been denied regular admission to Madison College 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 having earned the satisfactory quality point average as specified above, and by his having met any specific requirements of the department he 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 65 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 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

Madison College offers programs leading to six 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.), and Bachelor of Music (B.M.).

The program of study leading to the Bachelor of Arts includes 43 semester hours in General Studies, 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 in 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, Sociology, Anthropology and Social Work, Special Education and Speech Pathology and Audiology.

* A student who completes the elementary year course for 8 semester hours credit will need to complete 14 semester hours. The language requirement may be satisfied by an Exemption Test.
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 133 for those in a vocal concentration and 135 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 33 semester-hour core program and options for concentration in the following areas: Accounting, Management, and Marketing.

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.

GENERAL STUDIES

Purposes of the General Studies Program

Madison College 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 needs which enriches his life and provides a foundation for later specialization.

In more specific terms, the General Studies program at Madison College 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 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**

<table>
<thead>
<tr>
<th>Group I</th>
<th>14 Semester Hours</th>
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<tbody>
<tr>
<td>a.</td>
<td>English 101-102</td>
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<td>b.</td>
<td>Mathematics</td>
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<td></td>
<td>Any 100 or 200 level 3-credit Mathematics course</td>
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<tr>
<td>c.</td>
<td>Oral Communications</td>
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<tr>
<td></td>
<td>Comm. 200, 222, or 226</td>
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<td>d.</td>
<td>Physical Education</td>
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<td>Any P.E. activity course</td>
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<table>
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<tr>
<th>Group II</th>
<th>29 Semester Hours</th>
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<tbody>
<tr>
<td>a.</td>
<td>Fine Arts</td>
</tr>
<tr>
<td></td>
<td>One course selected from Art 200, 201; Comm. 250 (Theatre); Mus. 200, 201; or P.E. 349 (Dance)</td>
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<tr>
<td>b.</td>
<td>Humanities</td>
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<td>Two courses selected from the following:</td>
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<tr>
<td></td>
<td>English—any 200 level course</td>
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<td></td>
<td>Foreign Languages (French, German, Greek, Latin, Russian, Spanish) any literature course</td>
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<tr>
<td></td>
<td>Humanities—any 100 or 200 level course</td>
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<td></td>
<td>Religion—any 100 or 200 level course</td>
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<tr>
<td>c.</td>
<td>History</td>
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<tr>
<td></td>
<td>Two courses selected from any 100 or 200 level History course with at least one of the courses in a non-US area.</td>
</tr>
<tr>
<td>d.</td>
<td>Natural Science</td>
</tr>
<tr>
<td></td>
<td>Two courses selected from the following:</td>
</tr>
<tr>
<td></td>
<td>Bio. 100, 105, 120, or 130</td>
</tr>
<tr>
<td></td>
<td>Chemistry—any 100 level course</td>
</tr>
</tbody>
</table>
Geol. 100, 130, or 211
Phys. 109, 130, 135, 220, 231-232

e. Social Science ......................... 6 hours

Two courses selected from the following:
Anthropology—any 100 or 200 level course
Econ. 220, 225, 230, 235
Geog. 120, 210, 236, 280
Hth. 270, 354
HE. 133
PoSc. 110, 210, 225, 230
Psyc. 231-232, 233-234
Sociology—any 100 or 200 level course — 43 hours

CREDIT BY DEPARTMENTAL EXAMINATION

Examinations for credit in courses offered by Madison 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. An enrolled student may make application to take an examination for credit in most courses in the undergraduate curricula. The student should be certain that he has the minimal preparation and background before seeing the Head of the Department in which he is 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 Madison College 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 Madison College.

At each session, the President of the college, 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 college 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.

Every new student will be assigned to an academic advisor who will discuss with him Madison’s academic policies and procedures, the various programs of study, advanced placement and exemption testing, and registration procedures. The student will also plan with his advisor his schedule of classes for the fall semester. The freshman student will remain with this advisor until the early part of the second semester at which time he is assigned to a departmental advisor in his major field of study.

While orientation is a program designed primarily to assist the student in his initial contact with college life, academic advising is an on-going relationship with the student that extends until he graduates. Shortly after the beginning of the spring semester the freshman student is transferred from his summer advisor to a permanent advisor in the department in which he plans to major. The role of the faculty advisor is to assist and advise the student in the attainment of his educational goal. He does not control the student’s program. Madison College believes that the responsibility of fulfilling the requirements of a particular degree program lies with the student; therefore, he should be familiar with the requirements as outlined for him in his college catalog.

PROGRAMS FOR IMPROVING BASIC ACADEMIC SKILLS

The College 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 his study habits and attitudes that may be influencing his 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 College expects students to be able 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 College 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

An entering student, in conference with his advisor, may determine a major program of study. If he has not decided on a specific major, he may register as an "Undeclared" major. The student who has not decided on a major field of study is encouraged to discuss some of his interests with his 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 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 without securing special permission, up to a maximum of 18 credits.

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 the 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 credits without special permission. When required, special permission is 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 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 has received.

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

Sophomores are students with 29-59 semester hours of credit.

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Juniors are students with 60-92 semester hours of credit.

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

GRADING SYSTEM

The College 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 advisor. Mid-semester grades on all courses are sent to freshmen.

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

A—Superior.  CR—Credit for average or better work.
B—Good.      NC—No credit awarded.
C—Average.    W—Withdrawal.
D—Passing.    I—Incomplete.
F—Failure.

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.

GRADE APPEAL PROCEDURE

A student who wishes to appeal a grade 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 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 and, also, the authority to require the faculty member 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 receiving credit in that course. Because of the wide variety of courses and teaching methods at Madison, the College recognizes that the nature of a student’s participation in the work of a course cannot be prescribed on a College-wide basis. For this reason classroom attendance is not a matter subject to regulation by the College. A student’s attendance in class and laboratory is rather a matter between him 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 has completed at least 28 semester hours at Madison and has attained a 2.25 cumulative grade point average. A transfer student may take courses on the Credit/No-Credit option if he has completed 28 semester hours with at least 14 semester hours at Madison. 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. Courses within major and minor departments and those required by the major and minor programs outside of the major and minor departments may not be taken Credit/No-Credit. All other courses may be taken on the Credit/No-Credit option.
3. A total of 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 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 faculty advisor.

A fee of $5.00 is required for any adjustment made after the “no fee” schedule adjustment period as specified in the College 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 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 advisor and the dean of the school in which he 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 College 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 COLLEGE

A student withdraws from the college when he terminates his enrollment before completing the semester or Summer Session period for which he registered. A student desiring to withdraw must have a conference with the Assistant Dean of Students and complete the withdrawal request form available in the Dean of Students Office. Students who are unsure about withdrawing are encouraged to talk to a member of the Counseling Center staff before initiating withdrawal procedures.

The Assistant Dean of Students reports the withdrawal to the Dean of Students who must approve such requests, set the official withdrawal date, and notify other college 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 is enrolled. A student withdrawing with official approval will receive a grade of “W”.

Students enrolled in an off-campus course may withdraw from College by securing a “Request for Withdrawal” form from the Center Director or the Office of the Dean of Students. This form should be completed and returned to the Office of the Dean of Students, 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 with-
drawal form is received in the Office of the Dean of Students within thirty days after leaving the campus. Adjustments will not include non-refundable 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, his quality credit average is 2.50. Grades earned at other institutions are not used in computing the Madison quality credit average.

A, B, C, D, and F grades earned at Madison 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.

RETENTION POLICY

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

Undergraduate 49
1. Quality point deficiency is twice the number of semester hours attempted at Madison minus the number of quality points earned at Madison.

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

2. **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 grade point deficiency is not sufficient to warrant his being placed on “Academic Probation”.

3. **Academic Probation**
   
   Academic status for a student is denoted as follows;

<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>
</tr>
<tr>
<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>

4. **Academic Suspension**
   
   Academic status for a student is denoted as follows:

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

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

   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 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 College in athletics or performing arts.

4. A student on academic probation is expected to confer regularly with his 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 academic deficiency, he may appeal to the Retention Review Committee for reinstatement the following semester. The appeal must be in writing and should be sent to Dean Julius B. Roberson, Secretary of the Committee.

ACADEMIC HONORS PROGRAMS

The Honors Programs at Madison College 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 College offers Honors sections in a number of different departments including English, History and Mathematics. These and additional Honors sections will be listed in the Madison College 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 Madison College 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 Madison College 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 Madison College.

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 Madison College...
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 Madison College after a separation of two calendar years and who maintains 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 Madison College.

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 Madison College.

**STUDY ABROAD**

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

Qualified students may study in a foreign university during their junior year, and under special circumstances during the sophomore year. Information about American Association of College and University International Study Centers in Mexico, Canada, and Italy can be obtained from Dr. Frank Gerome, History Department, the AASCU Campus Advisor.

Madison College 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 Mr. John Stewart, 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 the final term, on total credits earned, General Studies program, degree requirements, cumulative grade point average earned at Madison College, as well as other College-wide requirements.

To receive a degree from Madison College, 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 major subject;
5. Meet the course requirements of one of the curricula leading to the degree for which he is a candidate;
6. Have spent a minimum of two semesters in residence at Madison College, and have earned a minimum of 32 semester hours of credit during this term of residence;
7. Be a student at Madison College 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 College 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 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 Madison 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 graduating class are using.

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

CHANGE IN CATALOG

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

2. There is no limit to the number of catalog changes the student may make as long as he 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 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 College 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 write to the Director, Division of Teacher Education in the State Department of Education in Richmond.
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 Madison College 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 College initiated its all-year program in 1929—the first Virginia college to do so.

Along with the regular Degree in Three Plan, Madison College 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 Madison College 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.

Study Abroad—For information concerning opportunities to study in foreign nations, consult page 53.

EARNING OF A SECOND BACCALAUREATE DEGREE

A student who has previously earned 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 Madison College 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 Madison College 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 College, 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.
The Office of Continuing Education has the responsibility for administering all off-campus credit courses and programs.

The College 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. Madison College 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 College 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 college, Madison College 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 Madison College, Harrisonburg, Virginia 22801.

For information concerning non-credit courses and programs, both on and off campus, contact the Office of Public Affairs, Madison College.
THE GRADUATE SCHOOL

Madison College's Graduate School was established in 1954, when authorization by the State Board of Education made it possible for the College to offer programs leading to the degrees of Master of Arts in Education and Master of Science in Education. The Southern Association of Schools and Colleges 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. Subsequent actions of the State Council permitted the College to offer the Master of Arts degree in Art, English, 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, Madison College, Harrisonburg, Virginia 22801.

LIBRARIES AND LEARNING RESOURCES

Madison Memorial Library serves as a focal point for research and study at Madison College. The Library houses the equivalent of 300,000 volumes including books, periodicals, microforms, and government documents. The Library adds a significant number of volumes each year and currently receives 2,000 periodicals. Recently it has added such special collections as the Laird L. Conrad Memorial Law Library, various audiovisual materials, and the ultrafiche 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 acquisitions list is published, 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 Maury Halls, but are administered in coordination with the Library operations. Audiovisual equipment, materials, and assistance are provided for use in the College's instructional programs.
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 College, 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 Madison College 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 the student to become a responsible as well as a responsive citizen in both his 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 ........................ Mr. Wilbur T. Harnsberger, Jr., Head
History ......................... Dr. Raymond C. Dingledine, Jr., Head
Mathematics ................. Dr. William M. Sanders, Head
Music .......................... Dr. Joseph J. E'stock, Head
Philosophy and Religion ...... Dr. William E. Callahan, Head
Physics ........................ Dr. Robert E. Kribel, Head
Political Science and Geography .... Dr. Sidney R. Bland, Acting Head
Sociology, Anthropology, and Social Work .... Dr. Jack H. Williams, Head

Interdisciplinary Studies 61
INTERDISCIPLINARY PROGRAMS

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

American Studies  Pre-Engineering
Criminal Justice  Pre-Law
General Science  Pre-Medicine
General Social Science  Pre-Nursing
Humanities  Pre-Physical Therapy
Latin American Studies  Russian Studies
Medical Technology  Sino-Soviet Studies
Pre-Dentistry  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 Madison College 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

American Studies

501—Workshop in American Studies

Anthropology

282—Cultures of Appalachia
286—American Folk Culture
312—Indian Societies of North America
327—North American Archaeology
490—Special Studies in Anthropology*
494—Senior Seminar in Anthropology*
544—Field Techniques in Archaeology*

*When the topic is applicable to American Studies.
| ART | 408—Art History: Arts of the United States  
490—Special Studies in Art*  
508—Internship—Museology (Cross listed with History) |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS ADMINISTRATION—ECONOMICS</td>
<td>478—Economic History of the United States</td>
</tr>
</tbody>
</table>
| COMMUNICATION ARTS | 335—Free Speech in America  
336—Contemporary American Political and Social Rhetoric  
387—History of American Journalism  
490—Special Studies in Communication Arts*  
540—Seminar in Theater*  
545—American Theater History |
| 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 (Cross listed 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 501. Workshop in American Studies. 3 credits.

Designed to provide qualified students with the opportunity to explore various topics pertaining to American Studies.

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.
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. A sufficient concentration of courses must be taken in at least one science area to meet State of Virginia teaching certification requirements in 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 the General Science requires 8 credits in each of three of the science disciplines.

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 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>
<th>Sophomore Year</th>
<th>Credit Hours</th>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
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<tr>
<td>Math. 125-126</td>
<td>6</td>
<td>Hth. 270</td>
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<td>Electives (Science)</td>
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<td>Psyc. 233-234</td>
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<td>Electives (Science)</td>
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<td>Electives</td>
<td>2</td>
<td>Fine Arts</td>
<td>3</td>
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<tr>
<td></td>
<td>32</td>
<td>Humanities</td>
<td>6</td>
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<th>Senior Year</th>
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<td>Educ. 470</td>
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<td>SeEd. 371 I</td>
<td>3</td>
<td>Educ. 480</td>
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<td>History</td>
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<td>Phil. 390</td>
<td>3</td>
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<tr>
<td>Electives (Science)</td>
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<td>Electives (Science and other areas)</td>
<td>18</td>
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<td>Electives</td>
<td>12</td>
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**Sciences Interdisciplinary Courses**

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

SCI. 310. Science in the Elementary School (3, 2), 4 credits.

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.

**MAJOR IN GENERAL SOCIAL SCIENCE**
**(B.A. Degree)**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
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<tr>
<td>Comm. 200, 222 or 226</td>
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<tr>
<td>Eng. 101-102</td>
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<tr>
<td>History</td>
<td>6</td>
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<tr>
<td>PoSc. 110</td>
<td>3</td>
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<tr>
<td>Soci. 139</td>
<td>3</td>
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<tr>
<td>Fine Arts</td>
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<tr>
<td>Natural Science</td>
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<th>Sophomore Year</th>
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<tr>
<td>Econ. 230-235</td>
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<td>*Foreign Language</td>
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<tr>
<td>Geog. 120</td>
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<td>Phil. 240</td>
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<td>Humanities</td>
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<td>Mathematics</td>
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<tr>
<td>Geography Elective</td>
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<td>Political Science Electives</td>
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<td>Soci. 250</td>
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<td>Electives</td>
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<td>History Electives</td>
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<td>Political Science Elective</td>
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<tr>
<td>Electives</td>
<td><strong>23</strong></td>
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</table>

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.

* See Foreign Language requirements for B.A. Degree

66 Interdisciplinary Studies
### MAJOR IN GENERAL SOCIAL SCIENCE  
(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>Comm. 200, 222 or 226</td>
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<td>Eng. 101-102</td>
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<td>Geog. 120</td>
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<td>PoSc. 110</td>
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<td>Mathematics</td>
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<tr>
<td>Soci. 139</td>
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<td>Physical Education</td>
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<td>Fine Arts</td>
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<tr>
<th>Junior Year</th>
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<th>Senior Year</th>
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<tbody>
<tr>
<td>Geography Elective</td>
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<td>History Elective</td>
<td>6</td>
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<tr>
<td>Political Science Elective</td>
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<td>Soci. 250</td>
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</tbody>
</table>

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.

### 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.

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 acquire an 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.

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>
<th>Course Code</th>
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<tr>
<td>Anth. 325</td>
<td>Indian Societies of Mexico and Central America</td>
<td>3</td>
</tr>
<tr>
<td>Art 303</td>
<td>The Arts of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Geog. 337</td>
<td>Geography of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Geog. 590</td>
<td>The Tropical World</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 267</td>
<td>History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 268</td>
<td>Contemporary Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 545</td>
<td>Latin America and the United States</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 546</td>
<td>Mexico, Central America, and the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 547</td>
<td>South America</td>
<td>3</td>
</tr>
<tr>
<td>PoSc. 350</td>
<td>Governments of Latin America</td>
<td>3</td>
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<td>Span. 101-102</td>
<td>Elementary Spanish (if needed)</td>
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<td>Span. 231-232</td>
<td>Intermediate Spanish</td>
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<td>Span. 300</td>
<td>Spanish Conversation and Composition</td>
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<td>Span. 308</td>
<td>Latin American Civilization</td>
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<td>Span. 315</td>
<td>Spanish Phonetics</td>
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<tr>
<td>Span. 327-328</td>
<td>Survey of Spanish-American Literature</td>
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TWO-YEAR PRE-ENGINEERING PROGRAM

Madison College 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>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 101-102</td>
<td>8</td>
<td>Math. 237-386</td>
<td>6</td>
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<td>Eng. 101-102</td>
<td>6</td>
<td>Engr. 201-202</td>
<td>6</td>
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<tr>
<td>Math. 235-236</td>
<td>10</td>
<td>Physics 231-232</td>
<td>8</td>
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<tr>
<td>Engr. 101-102</td>
<td>4</td>
<td>Math. 238</td>
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<td>Electives</td>
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<td>Physical Education</td>
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<td></td>
<td>32</td>
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<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>32</td>
</tr>
</tbody>
</table>

Pre-Engineering Interdisciplinary Courses

ENGR. 101-102. Engineering Graphics (1, 2), 2 credits each semester.

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. Statics, 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.

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 student’s total program should provide him with a broad informational and cultural preparation and should help him in developing his reasoning ability.
Certain courses are of value as preparation for legal study. These include courses in communication, including composition, language, and speech, which enable one to express himself well; in the liberal arts, including work in the humanities and social studies, which help one appreciate and perform effectively in his 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, Dr. William R. Nelson, or Judge John A. Paul. 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 required 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, 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 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)

<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>Comm. 220, 222 or 226</td>
<td>3</td>
<td>History</td>
<td>6</td>
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<td>Eng. 101-102</td>
<td>6</td>
<td>PoSc. 240</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 240</td>
<td>3</td>
<td>Rus. 231-232</td>
<td>6</td>
</tr>
<tr>
<td>Rus. 101-102</td>
<td>8</td>
<td>Natural Science</td>
<td>8</td>
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<tr>
<td>Fine Arts</td>
<td>3</td>
<td>Physical Education</td>
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<tr>
<td>Mathematics</td>
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<td>Electives</td>
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<td>Electives</td>
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<td>31</td>
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| Junior Year | | Senior Year | |
| Econ. 301 | 3 | PoSc. 320 | 3 |
| Geog. 348 | 3 | Russian Studies Elective | 3 |
| Hist. 385-386 | 6 | Electives | 27 |
| Rus. 265-266 | 6 | | 33 |
| Electives | 13 | | |
| | 31 | | |

**MAJOR IN SINO-SOVET STUDIES**
(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>Comm. 200, 222 or 226</td>
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<td>Hist. 385-386</td>
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<td>PoSc. 240</td>
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<tr>
<td>History</td>
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Interdisciplinary Studies 71
Major in Sino-Soviet Studies (B. A. Degree)

Freshman Year

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<th>Course</th>
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Sophomore Year

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<td>PoSc. 240</td>
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<td>Rus. 231-232</td>
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Junior Year

<table>
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<tr>
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<tbody>
<tr>
<td>Econ. 301</td>
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<tr>
<td>Geog. 348</td>
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</tr>
<tr>
<td>Hist. 273</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 450</td>
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<tr>
<td>Phil. 240</td>
<td>3</td>
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<tr>
<td>Rus. 265-266</td>
<td>6</td>
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<tr>
<td>Sino-Soviet Studies Elective</td>
<td>3</td>
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<tr>
<td>Electives</td>
<td>8</td>
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<td></td>
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Senior Year

<table>
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<tr>
<th>Course</th>
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<tr>
<td>PoSc. 320</td>
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<tr>
<td>PoSc. 332</td>
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<td>PoSc. 334</td>
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<td>PoSc. 430</td>
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<tr>
<td>Electives</td>
<td>20</td>
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<td></td>
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</tbody>
</table>

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.

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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: BuAd. 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

Madison College offers five 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
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 Madison College upon the successful completion of the following three-year program at the College 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>
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<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>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>History</td>
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<tr>
<td>Math. 105</td>
<td>3</td>
<td>Humanities</td>
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<tr>
<td>Math. 220</td>
<td>3</td>
<td>Social Science</td>
<td>6</td>
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<tr>
<td>Physical Education</td>
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<td>Elective**</td>
<td>2</td>
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<tr>
<td>Humanities</td>
<td>3</td>
<td>**</td>
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<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Credit Hours</th>
<th>Senior Year</th>
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</thead>
<tbody>
<tr>
<td>Bio. 280</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>Bio. 360</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>Chem. 356</td>
<td>4</td>
<td>Students interested in a major in medical technology should consult Mr. Robert Graves, Biology Department, 317 Burruss Hall.</td>
</tr>
<tr>
<td>Phys. 135</td>
<td>4</td>
<td><strong>Students electing to attend a “2-2” program should take Chem. 356 their sophomore year.</strong></td>
</tr>
<tr>
<td>Fine Arts</td>
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<tr>
<td>Electives</td>
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</tbody>
</table>

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PRE-MEDICAL AND PRE-DENTAL PROGRAMS

Madison College 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

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 Madison College 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>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
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<tr>
<td>Bio. 100 or 120</td>
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<td>Bio. 270</td>
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<td>Bio. 290</td>
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<td>Bio. 280</td>
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<td>Chem. 121-122</td>
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<td>Psyc. 231-232</td>
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<td>Hist.</td>
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<td>Physical Education</td>
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<td>Social Science</td>
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<tr>
<td></td>
<td>30</td>
<td>Electives (Math., Physics, or Nutrition recommended for certain programs)</td>
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</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 Madison College 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>
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</thead>
<tbody>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Bio. 120</td>
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<tr>
<td>Chem. 121-122</td>
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<td>Bio. 290</td>
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<td>Math. 105-106</td>
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<td>Psyc. 231-232</td>
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<td>Phys. 130-135</td>
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</tbody>
</table>

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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, Chatelain, Giles, 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. 40-41), 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:

I. Required core courses in Art ......... 30 sem. hrs.
   Art 140, 141 Design; Art 150, 151 Drawing .... 12
   Art 205, 206, and an elective Art History .... 9
   Art 235 Sculpture, 360 Painting ............. 6
   Art 380 Seminar in Aesthetics ............. 3

II. Specified courses in an area of concentration .... 18 sem. hrs.

A. Painting and Graphics Area
   All students in area take Art 350A, 460A, and Art 353 or 354.
   Option 2) 9 hrs. from 255, 355A, 355B, 355C (Photography).
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.

Students who wish to be certified to teach art must also satisfy the endorsement requirements prescribed by the Virginia State Board of Education. The minimum semester hours required in each area may be chosen from the courses indicated in parentheses.
I. Design, Drawing, Painting, Printmaking ............ 12 sem. hrs. 
(140, 150, 151, 245, 345, 354, 360, 366, 456, 460)

II. Sculpture ........................................... 6 sem. hrs. 
(141, 235, 434)
Ceramics and Crafts ................................. 6 sem. hrs. 
(121, 122, 125, 321, 322, 373, 474)

III. History, Appreciation of Art ..................... 6 sem. hrs. 
(200, 201, 205, 206, 301, 303, 306, 380, 405, 406, 408)

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)

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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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| Junior Year                   |              | Senior Year                   |              |
| Art in area of               | 9            | Art in area of               | 3            |
| concentration                |              | concentration                |              |
| Art History                  | 3            | Art Electives                | 6            |
| Art Electives                | 6            | Electives                    | 22           |
| History                      | 6            |                              | 31           |
| Physical Education           | 2            |                              |              |
| Electives                    | 6            |                              |              |
|                               | **32**       |                              |              |

Art 79
MAJOR IN ART
(B.S. Degree)

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Junior Year

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Senior Year

| Art Electives | 9    | Electives | 24 |
| Social Science or Natural Science | 24 |
| Electives | 33 |

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.

MAJOR IN ART HISTORY
(B.A. Degree)

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<td>Eng. 101-102</td>
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<td>History</td>
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<td>Mathematics</td>
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<td>Electives</td>
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<td>31-33</td>
<td>Social Science</td>
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</table>

Junior Year

| Credit Hours | 12 | 3 | 3 | 4 | 3 | 6 | 31 |

Senior Year

| Art 380       | 3    | Art History Elective | 3 |
| Electives from list of Related Courses and/or Studio Courses | 6 |
| Electives     | 21   | Electives            | 33 |

80 Art
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.

A study of artistic characteristics and developments of Pre-Columbian Latin America. Also included will be a study of art-producing techniques used in these areas.

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).

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.


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 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 metals including forming, repousse, stone setting, metal finishing, enameling and centrifugal casting.

ART 125. *Ceramic Crafts* (0, 6), 3 credits.

Introduction to ceramic hand-building processes, use of the potter’s wheel and glazing; exploration of techniques in glass and mosaics.

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.

(Students must provide a fully manual 35mm camera and a light meter which may be built into the camera or separate. Additional costs for materials in this class will be approximately $10.00.)

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 visual awareness and his visual and technical proficiency through an intensive exploration of personal imagery. (Lab fee $10.00.) *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. *Watercolor (0, 6)*, 3 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. *Prerequisite: Art 140.*

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 total of 9 credits.

Problems in ceramic design with increased attention to the chemical composition of glazes and clays. *Prerequisite:* Art 373.

ART 524. *Advanced Weaving and Textile Design* (0, 6-8), 3-4 credits.

Studio projects in handcrafted textile arts. Ordinarily the emphasis will be on weaving or alternatively, methods of textile decoration. *Prerequisite:* Art 121.

ART 526. *Advanced Jewelry and Metalwork* (0, 6-8), 3-4 credits.

Studio projects in the metal arts. The student may elect to widen his experience in these craft areas, or to specialize in one or two of them. Emphasis is on high quality of craftsmanship and design. *Prerequisite:* Art 322.

ART 530. *Sculpture* (0, 6-12), 3-6 credits.

Advanced sculptural projects with choices from a wide range of materials and techniques including welding, casting, wood and metal construction, wood and stone carving, and others. *Prerequisite:* Art 434.

ART 550. *Printmaking* (0, 6-8), 3-4 credits.

Problems in printmaking chosen from intaglio processes such as etching and engraving, and from woodcut, serigraphy, and lithography. *Prerequisite:* Art 353 or 354.

ART 560. *Graphics and Painting* (0, 6-12), 3-6 credits.

Studio work aimed towards the development of the student's individual expressive means. The student may choose from a wide variety of media. *Prerequisites:* Art 244, Art 360, or equivalents.

ART 570. *Advanced Ceramic Design* (0, 6-12), 3-6 credits.

Individual development in the techniques and processes of ceramic design, with emphasis upon quality as evidenced in form, color, and decoration. *Prerequisite:* Art 373 or equivalent.

**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*, 6 credits. 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. Fisher, 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
(Experimental Chemistry). The mathematics requirement may be met by 6
semester hours selected from Math. 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. 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 require-
ments 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, 485, 510, 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, 510, 551, and 552. Optional electives are
Bio. 280, 385, 310, 325, 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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Junior Year

| Bio. Electives                | 9            | Electives                 | 23           |
| Social Science                | 6            |                           | 32           |
| Humanities                    | 3            |                           |              |
| Electives                     | 11           |                           |              |
|                               | 33           |                           |              |

Senior Year

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.
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 Madison students.)


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.)


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.

*Biology* 89
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 credits.
Studies in special areas of biology. May be repeated with change of subject matter and is open to all students.

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. 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.

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. 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.

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 phylogenetic 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 A-F. 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. 497 A, 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.

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 510. *Animal Ecology* (summer, 2, 3), 3 credits.

A 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.

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 physicochemical 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.*


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.*
DEPARTMENT OF CHEMISTRY

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

Professors Casali, 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, the 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 college 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 Madison 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 if the student wishes to pursue an M.S. in Chemical Engineering, he may enter the program directly in the summer following the receipt of the B.S. degree.

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>
</tr>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Math. 236</td>
<td>5</td>
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<tr>
<td>Math. 135, 235</td>
<td>8</td>
<td>Phys. 231-232</td>
<td>8</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
<td>Chem. 290</td>
<td>3</td>
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<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Chem. 234, 235, 236</td>
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<tr>
<td>Electives</td>
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<td>Physical Education</td>
<td>2</td>
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Chemistry 95
Junior Year

Chem. 356, 357
Chem. 450
Social Science
Humanities
Electives

Senior Year

Chem. 485, 486, 487
Chem. 451
Social Science
Electives

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.

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 chemical background to be utilized in other fields of work as well as for further work in Chemistry.

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. 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. 439. Intermediate Biochemistry (3, 3), 4 credits.

Emphasis is on chemistry of biologically important compounds. Modern methods of isolation and characterization will be stressed. Prerequisite: Chem. 236.

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, Burr, Goodyear, King, and Smith; Assistant Professors Frantz, Fuller, Hall, Lyndrup, and Neckowitz; Instructors Holp, Kirkland, Maiman, Morello, Respress, 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 15 semester hours, selected from the following list, subject to the approval of the Head of the Department: Comm. 210 (Process of Human Communication), Comm. 211 (Oral Interpretation), Comm. 251 (Basic Acting), Comm. 225 (Argumentation and Debate), Comm. 271 (Introduction to Radio and Television), Comm. 285 (Introduction to Journalism), and Comm. 385 (Mass Communication and Society). 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 15 credit hours from SeEd. 371J (Clinical Techniques—Communication Arts Education Methods), Comm. 212 (Voice and Diction), Comm. 305 (General Semantics), Comm. 311 (Advanced Oral Interpretation), Comm. 314 (Phonetics), Comm. 326 (Persuasive Speech), Comm. 329 (Business and Professional Speaking), Comm. 335 (Free Speech in America), Comm. 336 (Contemporary American Political and Social Rhetoric), Comm. 421 (Survey of Rhetorical Theory and Criticism), Comm. 500 (Seminar in Communication), Comm. 501A (Teacher’s Workshop: Co-Curricular Activities), Comm. 501D (Teacher’s Workshop: 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 15 credit hours, including 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. 240 and Comm. 340 (Practicum—Theatre), 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 15 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 Television Producer), Comm. 560 (Seminar in Broadcast Media), Comm. 260 and Comm. 360 (Practicum—Radio/Television/Film), 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 fifteen credit hours from Comm. 281 (News Writing), Comm. 284 (Photo-Journalism), Comm. 378 (News and Public Affairs), Comm. 381 (Advanced News Writing), Comm. 382 (News Editing), Comm. 387 (History of American Journalism), Comm. 481 (Feature Writing), Comm. 483 (Editorials and the Editorial Page), Comm. 580 (Seminar in Journalism), Comm. 280 and Comm. 380 (Practicum—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.

TEACHER CERTIFICATION

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 the department office and in the School of 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.

**COMM. 210. The Process of Human Communication, 3 credits.**

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.

**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. 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 literature 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 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. 284. Photo-Journalism, 3 credits.

Study of news photography with emphasis upon practical application.

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.

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. General Semantics, 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.

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.

COMM. 329. Business and Professional Speaking, 3 credits.

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.

104 Communication Arts
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.


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.


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.

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.


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.

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.

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*, 2 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 Newswriting, 3 credits.

Advanced study of news writing and news gathering techniques. Emphasis upon feature and investigative stories.
COMM. 382.  News Editing, 3 credits.


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.

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.

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. 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.

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.

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. Consideration given to scenery, auditoriums, costumes, management, and acting practices. Emphasis upon acquiring an understanding of the most important factors which have influenced performances during these periods.

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 development of techniques designed to enhance the skills of advanced students. Prerequisite: Comm. 351.

Communication Arts 107
COMM. 461. Broadcast Management, 3 credits.

Study of the problems of managing a radio or television station. Emphasis upon solving specific management problems. Consideration of the social, economic and legal responsibilities 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 productions for the campus FM station. Consideration of production, direction, and presentation of radio programming. Prerequisite: Comm. 365.

COMM. 468. 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 telecasting. 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. 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 Madison 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. 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.


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.

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

James Madison Distinguished Professor Locke; Professors Adams, Cavanaugh, Funston, Hawthorne, McMurray, and Poindexter; Associate Professors Foley, D. Hallman, Leigh, Nickels, Ruff, and Swink; Assistant Professors Anderson, Carnes, R. Cohen, J. Eby, Farrar, Frederick, Geary, Hoskins, McNallie, Morley-Mower, Wszalek, and Zeiss.

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 the student 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 himself.

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 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 conferring with his 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. 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.

EXEMPTION FROM FRESHMAN ENGLISH COURSES

For procedures for exemption from freshman English courses, students should consult with the Coordinator of Freshman English in Keezell 206 or the Head of the English Department in Keezell 306.

MAJOR IN ENGLISH
(B.A. 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>Eng. 235 or 236</td>
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<tr>
<td>Foreign Language</td>
<td>6-8</td>
<td>**Foreign Language</td>
<td>6</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Phil. 240</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
<td>Fine Arts</td>
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</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 sophomore year, the student majoring in English should consult with his 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.
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 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.
Classical mythology and traditional myths in relations to English and American 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.

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.

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.

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.

Students interested in a program offered by the Department of Foreign Languages and Literatures should consult the Head of the Department, 301 Keezell Hall.

116 Foreign Languages & Literature
## MAJOR IN FRENCH
(B.A. Degree)

<table>
<thead>
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<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
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<tr>
<td>Fr. 101-102 or Fr. 231-232 or Fr. 300 and Fr. 308</td>
<td>6-8</td>
<td>Fr. 231-232 or Fr. 300 and Fr. 308 or Fr. 337-338 or Fr. 315 and Fr. 320</td>
<td>6</td>
</tr>
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<td>Elective in a Second Foreign Language</td>
<td>6-8</td>
<td>Elective in a Second Foreign Language</td>
<td>6</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Fine Arts</td>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Natural Science</td>
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<td>History</td>
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<td>Mathematics</td>
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<td>Physical Education</td>
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<td><strong>32-36</strong></td>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
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### Junior Year

| Fr. 300 | 3 | |
| Fr. 300 or 400 level courses | 6 |
| Phil. 240 | 3 |
| Electives | 21 | 33 |

### Senior Year

| Fr. 300 or 400 level courses | 9 | Electives | 21 |

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.

## MAJOR IN GERMAN
(B.A. Degree)

<table>
<thead>
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<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tr>
<td>Ger. 101-102 or Ger. 231-232</td>
<td>6-8</td>
<td>Ger. 231-232 or Ger. 300 and Ger. 308</td>
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</tr>
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<td>Elective in a Second Foreign Language</td>
<td>6-8</td>
<td>Elective in a Second Foreign Language</td>
<td>6</td>
</tr>
<tr>
<td>Comm. 200, 222 or 226</td>
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<td>Fine Arts</td>
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<td>Eng. 101-102</td>
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<td>Physical Education</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>32-36</strong></td>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

### Junior Year

| Ger. 300 | 3 | |
| Ger. 300 or 400 level courses | 6 |
| Phil. 240 | 3 |
| Electives | 21 | 33 |

### Senior Year

| Ger. 300 or 400 level courses | 9 | Electives | 21 |

*Foreign Languages & Literatures* 117
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.

**MAJOR IN RUSSIAN**  
**(B.A. Degree)**

<table>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Rus. 101-102 or</td>
<td>6-8</td>
<td>Rus. 231-232 or</td>
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<tr>
<td>Rus. 231-232 or</td>
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<tr>
<td>Eng. 101-102</td>
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<td>History</td>
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**Junior Year**

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<td>Electives</td>
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**Senior Year**

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.

**MAJOR IN SPANISH**  
**(B.A. Degree)**

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<th>Credit Hours</th>
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<tr>
<td>Span. 101-102 or</td>
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<td>Span. 231-232 or</td>
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Senior Year

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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.

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. 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.


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.

*Foreign Languages & Literatures* 119
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 *koine*. Greek life, Greek thought, and Greek culture are stressed. Especially recommended for Science, English, and Philosophy majors.

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.*
LAT. 415. Roman Lyric and Elegiac Poetry. 3 credits.
Selections from Propertius and Tibullus; major attention to Catullus and Horace. *Prerequisite: Second year of college Latin or equivalent.*

LAT. 446. Selected Topics in Roman Literature, 3 credits.
Study of a particular literary topic. Readings in Latin. This course may be repeated. *Prerequisite: Lat. 232 or permission of instructor.*

**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.)

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.*

*Foreign Languages & Literatures* 121
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 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.

FR. 420. The French Theater, 3 credits.

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.

FR. 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 French. Prerequisite: Fr. 320 or equivalent. Instruction is in French.

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**


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.

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, Lermontov, 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.

RUS. 446. Selected Topics in Russian Literature, 3 credits.

Study of a particular literary topic. This course may be repeated. **Prerequisite:** Rus. 300 or permission of instructor.

**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. 404. 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.
DEPARTMENT OF GEOLOGY

Mr. Wilbur T. Harnsberger, Head of the Department

Professor Sherwood; Associate Professors Amenta, Farmer, Harnsberger, and Roberts; Assistant Professors Campbell, Fichter, and Poché.

The Department of Geology offers programs of study which lead to careers as geologists in industry and in government, to teaching earth science in the secondary schools, and to further study in graduate school. A program of thorough preparation in theoretical and applied geology is designed to offer the student maximum flexibility in selecting undergraduate courses. The Department of Geology also provides courses to meet General Studies requirements in the natural sciences as well as electives for all students.

The minimum requirement for an undergraduate major in geology is 32 semester hours of geology courses. Required as part of this 32 hours are Geol. 100, Geol. 130, Geol. 200 or 235, Geol. 250, Geol. 364, and Geol. 365. The remaining hours in geology are selected by the student and his departmental advisor. The geology major is required to complete 16 semester hours in related sciences (biology, chemistry and physics) approved by his 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 German, French, 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.

Earth science teacher certification in secondary education requires 24 semester hours of specified courses in the earth sciences. 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 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.

The B.S. degree with a major in Geology requires a minimum of 128 credits distributed as follows:

Geology 127
The B.A. degree with a major in Geology requires a minimum of 128 credits distributed as follows:

32 semester hours in Geology (selected with approval of advisor)
16 semester hours supporting sciences (selected with approval of advisor)
6 semester hours Mathematics (selected with approval of advisor)
*32 semester hours additional General Studies (General Studies requirements in addition to 8 semester hours of Natural Science and 3 semester hours of Mathematics)
6-14 semester hours in a Foreign Language
3 semester hours in Philosophy
25-33 semester hours electives
* (See General Studies section in catalog—pgs. 40-41)

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 a natural science for all students.)
GEOL. 200. Rocks and Minerals (1, 4), 3 credits.

The identification and classification of rocks and minerals in hand specimen. A brief survey of origins of common minerals and rocks. Prerequisite: Four credits in Geol.

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.)

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.)

GEOL. 235. Mineralogy and Optical Crystallography (2, 4), 4 credits.

Morphological crystallography, optical crystallography and application to identification of isotropic, uniaxial, and biaxial minerals with the petrographic microscope. Identification of common minerals in hand specimen. Prerequisite: Four credits in Geol.

GEOL. 236. Petrography (2, 4), 4 credits.

Petrographic mineralogy. Identification and classification of the common igneous, sedimentary, and metamorphic rocks in thin section and hand specimen. Mineral identification in hand specimen. Prerequisite: Geol. 235.

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. 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 or 235.

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 crustal 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.

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. Prerequisites: Geol. 200 or 236 and 364.

GEOL 380. Igneous and Metamorphic Petrology (3, 3), 4 credits.
A study of the mineralogy, textures, field occurrence and genesis of igneous and metamorphic rocks. Prerequisite: Geol. 236.

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 399. Field Geology, 3 credits.
A concentrated field course in selected areas in the Appalachians, Piedmont, or Coastal Plain. To be lead 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 geometrics 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.

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 or 236.

130 Geology
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. Dingle, 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 32 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 history 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. 40-41).

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. Dingle, 201 Jackson Hall.

132 History
### Major in History
(B.A. Degree)

<table>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tr>
<td>Comm. 200, 222 or 226</td>
<td>3</td>
<td>Hist. 233-234</td>
<td>6</td>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Phil. 240</td>
<td>3</td>
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<td>Foreign Language</td>
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<td>Humanities</td>
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<td>History</td>
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<td>Natural Science</td>
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<tr>
<td>Fine Arts</td>
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<td>Social Science</td>
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<td>Mathematics</td>
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<td>Foreign Language (if needed)</td>
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<td><strong>32</strong></td>
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</tbody>
</table>

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.

### 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.

**HIST. 102. History of Civilization since 1650, 3 credits.**

A survey of important historical developments since 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.

**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.
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.

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.

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.

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.

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.

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.

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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 his 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, 2 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. 508. Internship in Museology, 3 credits.

See course description for Art 508.

HIST. 520. United States History, 1763-1800, 3 credits.

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.

HIST. 525. United States History, 1800-1850, 3 credits.

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.

HIST. 530. United States History, 1877-1919, 3 credits.

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. *Prerequisite*: 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.

HIST. 559. *Modern France*, 3 credits.

Topical studies in French history from the fall of Napoleon I to the present. *Prerequisite*: General Studies history or equivalent.

HIST. 562. *Modern Germany, 1918-Present*, 3 credits.

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.

HIST. 565. *Twentieth Century Britain*, 3 credits.

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.

HIST. 575. *Soviet Russia*, 3 credits.

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.

HIST. 578. *Eastern Europe*, 3 credits.

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.


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.

HIST. 585. *Southeast Asia*, 3 credits.

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.
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 Ault, Davenport, Kempton, Lazorack, Lenkerd, LePera, Smith, Spresser, Taylor, Zearfoss, 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 nonmathematician who needs to make effective use of mathematics in his 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 satisfies 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.

Mathematics 139
A. Applied Mathematics

B. Computer Science
5. Math. 389, Linear Computational Mathematics; or BEOA. 420, 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 his designate.

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.

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.


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, business administration, and related areas.)


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.)


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.

MATH. 238. *Digital Computer Programming*, 3 credits.

Flow charting, programming and solving problems using FORTRAN IV and the IBM 1130 Computer. *Prerequisite: Math. 235.*


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.*


Iterative techniques applied to finding the zeros of functions of one or more variables, interpolation and matrix inversion. *Prerequisite: Math. 238.*


Mathematical modeling with applications to business, ecology, psychology, sociology, and political science. *Prerequisite: 6 credits of mathematics or consent of the instructor.*

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. *Prerequisites: 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. Prerequisite: 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 applications 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.

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 Ininger, McEnderfer, McPherson, L. Watkins, and Wright; Assistant Professors Christman, Cross, J. Cryder, Kniebusch, Lance, Little, B. Smith, Tynes, and D. Watkins; Instructors S. Cryder, Ingles, and Moulton.

The Department of Music is organized for three purposes: (1) to prepare students to teach vocal and instrumental music in public and private schools; (2) to provide specialization for students who wish to pursue music as a profession in performance and in higher education; and (3) to provide for all students basic music study and opportunities for further musical growth. An important additional aim of the entire Music Department, including faculty and students, is to provide the campus community and the Harrisonburg area with cultural benefits through music performances presented throughout the year. These performances include faculty and student recitals, concerts by all of the musical ensembles within the department, and oratorio presentations.

In support of these purposes, the department offers programs leading to the degrees of Bachelor of Music, Bachelor of Music Education, and Master of Music Education. In addition there are several non-specialized music courses which students from any department may elect; these students from other departments may also take private or group music lessons, and perform in music ensembles for college credit.

The Music Department is a member of the National Association of Schools of Music.

ADMISSION REQUIREMENTS

It is assumed that a student choosing to major in music and music education will have sufficient musical talent to indicate promise in his field and that he will have had the necessary background and experience in the performance medium which he elects for his major.

A student desiring admission to Madison College as a major in Music must follow the usual procedure for admission to the College by contacting the Director of Admissions. The student will then be contacted by the Music Department relative to the required audition and music aptitude testing. No student will be accepted as a Music major who does not successfully meet the standards required in the major performance medium and the Music Aptitude Profile. The audition and Music Aptitude Profile results will also be utilized to determine class level placement.
Auditions are available in the Fall in selected areas across the State (announcements will be sent to music teachers and guidance counselors). On-campus auditions will be held on January 29, February 12, and March 19, 1977.

In cases where students find it impossible to appear for scheduled on or off-campus auditions, special auditions may be arranged by contacting the Head of the Music Department. The Music Aptitude Profile will be administered at the time of audition.

If no audition in person is at all possible, tape recordings will be acceptable, and will serve as the criterion for acceptance in Music. In this case, the Music Aptitude Profile will be administered during the student’s Summer Orientation appointment at the college. Auditioning students should be prepared to perform two selections of varying style and tempo which demonstrate their highest level of musical attainment.

DEPARTMENTAL REVIEWS AND JURIES

Realizing that entering music students have had varied musical experiences, the department affords students the opportunity to develop their musical abilities through private study in their performance areas.

As a measurement of individual progress and potential, juries are held at the close of each semester for all students. In addition to this, departmental reviews are required of first-year music students (including transfer students) at the close of the first and second semesters of study and again at the close of the second year of study.

The departmental review includes a private jury performance before music department faculty of prepared literature displaying the student’s present level of musicianship. In addition to this, evaluations of the student’s achievement in music theory, ear training, sight singing and keyboard proficiency are examined and correlated with the performance evaluation. From this, recommendations are made in reference to the student’s future potential as a major in music. Copies of these recommendations are given to the student’s academic advisor.

RECITAL PERFORMANCE POLICY

The performance policy is as follows: All students pursuing the degree of Bachelor of Music Education are required to present a departmentally-approved, public senior recital to be a full or half recital, at the discretion of the respective applied division. Bachelor of Music candidates will present a full recital in the senior year, and a half recital in the junior year, with the exception of keyboard majors, who will accompany a half recital of a vocalist, and a half recital of an instrumentalist, in lieu of the junior year solo half recital. Memorized recital presentations will be required in those areas which traditionally
demand them. The decision pertaining to this requirement shall be the responsibility of the appropriate applied division.

Students desiring to pursue major applied study in two performance areas are required to present at least a half recital in each area.

**RECITAL ATTENDANCE REQUIREMENT**

Attendance at recitals and concerts is a vital part of the education of a musician. Its importance lies in allowing the student to hear a variety of literature and to observe performing techniques from the student to the professional level. Students are encouraged to attend the numerous musical events which are available both on the Madison College campus and in the surrounding area.

As a requirement for graduation, each music major must attend a minimum of 15 recitals per semester for 6 semesters, or the equivalent. Credit will be given only for music department-sponsored or approved events. Except for performance in major ensembles, students will receive credit for attendance at concerts in which they perform, provided they satisfy recital attendance procedures. The student is expected to attend all faculty recitals and is encouraged to hear concerts in other applied areas as well as his own.

Attendance at Studio, Seminar, and Departmental Recitals is an integral part of the student’s applied music study and is not part of the Recital Attendance Requirement.

**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 semester-hour core program of music courses common to both the Bachelor of Music degree and the Bachelor of Music Education degree.

The freshman year of study is devoted to courses from the core requirements in music and to General Studies courses, to include Mus. 100-101 or 102-103 (Class Piano); Mus. 141-142 (Theory I, Writing and Analysis Techniques); Mus. 143-144 (Theory I, Aural Perception and Analysis); Mus. 175 (Music as a Profession); Applied Music (major instrument); a major ensemble each semester, and General Studies courses, including Mus. 200 (Music in General Culture), a special section of which is provided for music majors. Vocal majors in either degree will also take Mus. 120 (Diction for Singers), and instrumental majors will take MuEd. 107-108 (String Techniques).

Other core music courses common to all degrees include Mus. 241-242 (Theory II, Writing and Analysis Techniques); Mus. 243-244 (Theory II, Aural Perception and Analysis); Mus. 265-266 (Music History), and Mus. 317 (Basic Conducting).
Major ensemble participation, the credit for which will be included in the student’s transcript, but which may not be applied toward minimum degree requirements, is required for each semester in attendance, with certain modifications. Keyboard and vocal majors will follow specific concentration requirements. Participation in ensembles by a Bachelor of Music Education Degree student during the semester in which he registers for student teaching must be approved by the director of the ensemble and the student’s supervising teacher.

A Bachelor of Music Education Degree student must elect a major ensemble in his proposed teaching area. A Bachelor of Music student should elect an ensemble appropriate to his applied area. Wind or percussion majors in the BMEd. degree program are required to participate in Marching Band for a minimum of 2 years.

ENSEMBLE PARTICIPATION

All students should be aware of the suggested year-by-year program guide described in this section of the catalog. The semester-hour course loads are based upon a student’s participation in one major ensemble. A first-semester freshman will normally be limited to a 17 semester-hour load, and should not plan to participate in more than two ensembles.

After the freshman year the normal maximum will be three (3) ensembles. In every case, the choice of ensembles should be guided and approved by the major teacher, who is generally the advisor, and the director of the ensemble in which the student plans to participate.

Course overloads are inadvisable when the overload is due to excessive ensemble participation. Students who wish to participate in three or more ensembles should be advised that this may result in the need for one or more semesters in addition to the normal four year program.

BACHELOR OF MUSIC

The Bachelor of Music degree is designed for the student who possesses exceptional talent in applied music or in theory and composition and who desires to continue his musical training in graduate programs which will prepare him for a professional career in performance and/or teaching at the college level.

At the end of the common first year of music study, a student will have had the opportunity to apply for admission into the Bachelor of Music program and will be accepted 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**
Music: 43 hours, languages 16 hours; 132 hour total.
Mus. 120 (Diction for Singers); Mus. 318 (Intermediate Choral Conducting); Mus. 443 (Counterpoint); Mus. 449 (Advanced Analysis); Mus. 467 (Solo Vocal Literature); Mus. 477-478 (The Teaching of Voice); Mus. 495 (Senior Graduation Recital); Applied Music (voice) 22 hours; Applied Music (keyboard) 6 hours. A non-credit half-recital in the junior year is required. One year of French and one year of German (not reading courses) are required. One year of ensemble must be Opera Workshop.

**Piano concentration**
Music: 45 hours, Languages 12 hours; 130 hour total.
Mus. 318 or 319 (Intermediate Choral or Instrumental Conducting); Mus. 443-444 (Counterpoint); Mus. 449-450 (Advanced Music Analysis); Mus. 464 (Piano Literature); Mus. 473 (Private Piano Pedagogy); Mus. 474 (Group and Class Piano Pedagogy); Mus. 495 (Senior Graduation Recital); Applied Music (piano) 22 hours; Applied Music (voice) 3 hours; Applied Music (organ) 3 hours. A non-credit chamber recital is required in the junior year. In addition, 6 hours of German and 6 of French are required. Six semesters of ensemble participation are to be spent in Keyboard Performance Practicum, and two semesters in a major ensemble.

**Organ concentration**
Music: 43 hours, Languages 12 hours; 128 hour total. Mus. 318 or 319 (Intermediate Choral or Instrumental Conducting); Mus. 443-444 (Counterpoint); Mus. 449-450 (Advanced Music Analysis); Mus. 469 (Church Music); Mus. 468 (Organ Literature); Mus. 495 (Senior Graduation Recital); Applied Music (organ) 22 hours; Applied Music (minor studies) 6 hours. A non-credit chamber recital is required in the junior year. In addition, 6 hours of German and 6 hours of French. Six semesters of ensemble participation are to be spent in Keyboard Performance Practicum, and two semesters in a major ensemble.

**Instrumental concentration**
Music and electives: 57 hours; 128 hour total.
Mus. 319 (Intermediate Instrumental Conducting); Mus. 443-444 (Counterpoint); or 449-450 (Advanced Analysis); Mus. 472 (Instrumental Pedagogy); Chamber ensembles 6 hours (in addition to the 8 semester major ensemble requirement); Mus. 495 (Senior Graduation Recital); an advanced music literature elective; Mus. 463 (Twentieth Century Music); foreign language or music electives 5 hours; Applied Music 28 hours, which may all be in one area of performance or may be divided between a major instrument (22 hours minimum) and minor instruments (0-6 hours); MuEd. 107-108 (String Techniques). A non-credit half-recital is required in the junior year.
Theory and Composition concentration
Music: 57 hours, 128 hour total.
Mus. 251-252 (Music Composition); Mus. 318 or 319 (Intermediate Choral or Instrumental Conducting); Mus. 351-352 (Music Composition); Mus. 441-442 (Music Arranging); Mus. 443-444 (Counterpoint); Mus. 449-450 (Advanced Analysis); Mus. 451-452 (Music Composition); Mus. 463 (Twentieth Century Music); Mus. 495 (Senior Composition Recital); Music Literature electives 4 hours; MuEd. 105 (Percussion Techniques); MuEd. 107-108 (String Techniques); MuEd. 305 (Brass Techniques); MuEd. 306 (Woodwind Techniques); Applied Music (major instrument) 16 hours.

BACHELOR OF MUSIC EDUCATION

The Bachelor of Music Education degree qualifies the student for certification to teach instrumental music or vocal music in the public schools of Virginia and most other states. Students may also gain music skills required for church music, for private music teaching, and for work in a phase of the music industry.

A student desiring certification in both vocal and instrumental music must complete the requirements of both vocal and instrumental concentrations, with the following modifications. A voice major must complete a minor in an orchestral instrument and will not be required to take MuEd. 106, Instrument Familiarization. An instrumental major must complete a voice minor, which will replace the requirement of MuEd. 104, Vocal Techniques. A keyboard major will not be required to take MuEd. 106, Instrument Familiarization, or MuEd. 104, Vocal Techniques, since he will have a minor in each of those areas.

At the end of the common first year of music study, a student will have a basis for his choice of a degree program, and the faculty will have had an opportunity to assess his potential. Throughout his study, a student will be re-evaluated by the faculty; continuation in the Bachelor of Music Education program is contingent upon satisfactory evaluation results in all areas that will reflect potential success as a music educator.

Students in Bachelor of Music Education programs must complete the following common professional education sequence for teacher certification: Psyc. 233-234 (Human Growth and Development), Educ. 360 (Foundations of Curriculum), Educ. 470 (History and Philosophy of Educational Thought), and Educ. 480 (Directed Teaching), besides the required general education course, Hth. 370 (The School Health Program). U. S. History 233 or 234 must be taken as part of the General Studies program. MuEd. 481 (Seminar for Student Teachers) is recommended. 22 hour total.

Vocal concentration
Music: 33 hours, Secondary Education Methods 4 hours, 132 hours total. Mus. 120 (Diction for Singers); Mus. 318 (Intermediate Choral
Conducting); Mus. 441-442 (Music Arranging); Mus. 477 (The Teaching of Voice) or Mus. 473 or 474 (Piano Pedagogy); Applied Music major (voice or keyboard) 15 hours; Applied Music minor (keyboard or voice), 5 hours; MuEd. 106 (Instrument Familiarization); MuEd. 380 (Music in the Elementary School). The third year ensemble requirement will be met by keyboard majors with Piano Accompanying and Ensemble. Vocal majors may elect Opera Workshop for one year of major ensemble credit. In addition, SeEd. 371D, Junior High School Music, 2 hours, and SeEd. 371E, Choral Methods, 2 hours, are required.

**Instrumental concentration**

Music: 33 hours, Secondary Education Methods, 6 hours, 134 hour total.
To include: Mus. 319 (Intermediate Instrumental Conducting); Mus. 441-442 (Music Arranging); Applied Music (major instrument) 15 hours; Applied Music (minor instruments), 5 hours (a keyboard major must elect an applied minor of 5 hours on one orchestral instrument); MuEd. 104 (Vocal Techniques); MuEd. 105 (Percussion Techniques); MuEd. 107-108 (String Techniques); MuEd. 305 (Brass Techniques); and MuEd. 306 (Woodwind Techniques). The third year ensemble requirement will be met by keyboard majors with Piano Accompanying and Ensemble. Wind and percussion majors are required to participate in Marching Band for a minimum of 2 years. In addition, SeEd. 371F and SeEd. 371G, Instrumental Methods and Administration, 6 hours, are required.

**PIANO PROFICIENCY REQUIREMENT**

All students will be required to pass a piano proficiency examination. Bachelor of Music Education candidates must pass this examination prior to student teaching. The proficiency examinations cover keyboard skills in transposing, sight reading, improvisation, playing by ear, and harmonization. All incoming students will be assigned to a class piano section as determined by their major performance instrument (instrumental, vocal, or keyboard), their previous keyboard background, and their current theory class assignment. During this two-semester course, proficiencies are usually completed.

The purpose of the class piano program is to provide a foundation in skills and musical learnings basic to the needs of the musician. This course interrelates to music courses in theory and ear-training and allows students to make valuable transfers in skills to other performance mediums. Materials used are compatible to both traditional and contemporary composition and harmonic practices. Included is solo and ensemble keyboard literature of the baroque, classic, romantic and contemporary music periods.

**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. Required are:
1. Mus. 141-142 (Theory I, Writing and Analysis Techniques); Mus. 143-144 (Theory I, Aural Perception and Analysis); 8 hours;

2. Mus. 265-266 (Music History); 6 hours;

3. Two or more semester hours from the following: Mus. 443-444 (Counterpoint); Mus. 441-442 (Music Arranging); Mus. 463 (Contemporary Music);

4. Fourteen credit hours of musical performance, including 2 hours in class piano, Mus. 317 (Basic Conducting) 2 hours, and a minimum of 6 hours of applied music (private music study). The remaining 4 hours may be distributed between ensemble participation and additional applied music study.

This minor in Music does not qualify a student to teach music in the public schools of Virginia.

**MUSIC CONCENTRATION FOR EDUCATION MAJORS**

For students majoring in Education who desire a concentration program in Music, the following courses totaling 24 semester hours, are recommended: Mus. 200 (Music in General Culture); MuEd. 375 (Music for Children); Mus. 141-142 (Theory I, Writing and Analysis Techniques); Mus. 143-144 (Theory I, Aural Perception and Analysis); Mus. 317 (Basic Conducting); 9 credits in musical performance, including ensemble and applied music. A maximum of 4 credits in ensemble may count in this number, and 5 or more credits of the 9 must be in applied music.

**BACHELOR OF MUSIC EDUCATION**

**Vocal Concentration**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<td>Eng. 101-102</td>
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<td>MuEd. 106</td>
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<td>Mus. 100-101 or 102-103</td>
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<td>Mus. 120</td>
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<td>Mus. 241-242</td>
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<td>Mus. 141-142</td>
<td>6</td>
<td>Mus. 243-244</td>
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<td>Mus. 265-266</td>
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<td>Psych. 233-234</td>
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</table>

*To include 3 cr. free electives. General Studies requirements (see pgs. 40-41), to include Hist. 233 or 234, and Hth. 370.

**In addition, major ensemble participation is required each semester.**

See statement of ensemble requirements under “Requirements for all Music Degrees”, pgs. 147-148, and on pgs. 150-151 under “Vocal Concentration”.
### Junior Year

**Applied Music: Minor**
- Mus. 317-318: 2
- Applied Music: Major
- Mus. 441-442: 4
- MuEd. 380: 2
- Mus. 477, 473, or 474: 2
- SeEd. 371D: 2
- SeEd. 371E: 2
- Educ. 360: 3
- Electives*: 9

**Total Credits**: 34**

### Senior Year

**Applied Music: Minor**
- Mus. 441-442: 3
- Edu. 470: 3
- Edu. 480: 8
- Electives*: 17

**Total Credits**: 32**

### Instrumental Concentration

#### Freshman Year

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**Total Credits**: 33**

#### Sophomore Year

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**Total Credits**: 35**

#### Senior Year

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**Total Credits**: 31**

*To include 3 cr. free electives, General Studies requirements (see pgs. 40-41), to include Hist. 233 or 234, and Hth. 370.

**In addition, major ensemble participation is required each semester; see statement of ensemble requirements under “Requirements for all Music Degrees”, pgs. 147-148; the third-year ensemble requirement is to be met by Keyboard majors with Piano Accompanying and Ensemble. Wind and Percussion majors are required to participate in Marching Band for a minimum of two years. Vocal majors may elect Opera Workshop for one year of major ensemble credit.

--Music 153--
## Bachelor of Music Degree
### Vocal Concentration

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### Piano Concentration

<table>
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*To include 3 hours of free electives, and General Studies requirements (see pgs. 40-41).
**In addition, major ensemble participation is required for 6 semesters, and Opera Workshop for 2 semesters.
***In addition, major ensemble participation is required for 2 semesters, and Keyboard Performance Practicum for 6.
### Organ Concentration

#### Freshman Year

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<th>Course</th>
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<td>Mus. 175</td>
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<td>Applied Music: Organ</td>
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<td>Chamber Recital</td>
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<td>Mus. 443-444</td>
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#### Senior Year

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*To include 3 hours of free electives, and General Studies requirements (see pgs. 40-41).

**In addition, major ensemble participation is required for 2 semesters, and Keyboard Performance Practicum for 6.

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*Music 155*
### Instrumental Concentration

#### Freshman Year

<table>
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<tbody>
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<td>MuEd. 107-108</td>
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<tr>
<td>Mus. 141-142</td>
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<td>Mus. 143-144</td>
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<td>Mus. 175</td>
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#### Sophomore Year

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<tr>
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<td>Chamber Ensemble</td>
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<td>Mus. 241-242</td>
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<td>Mus. 243-244</td>
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#### Junior Year

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#### Senior Year

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<td>Mus. 443-444 or 449-450</td>
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<td>Mus. 463</td>
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<td>Mus. 472</td>
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<td>Mus. 495</td>
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#### Theory and Composition Concentration

#### Freshman Year

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<td>Mus. 143-144</td>
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#### Sophomore Year

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#### Junior Year

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<td>Mus. 351-352</td>
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#### Senior Year

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<tr>
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<td>Mus. 449-450</td>
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<td>Mus. 451-452</td>
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<td>Music Literature Electives</td>
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<td><strong>Total</strong></td>
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</table>

*To include 3 hours of free electives, and General Studies requirements (see pgs. 40-41).

**In addition, major ensemble participation is required for each semester in residence.

156 Music
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 sightreading, 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.

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.


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.

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.

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.*


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 347-348. *Form and Analysis*, 2 credits.

A review of the small structural elements—the section, phrase, periods, irregular phrases, binary, and ternary form. The study of larger song forms, the sonata form, rondo and fugue. Harmonic analysis of classic, romantic, and modern composition. *(Mus. 347 is prerequisite to Mus. 348.)*


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.
Arranging for ensembles, bands and orchestras. (*MUS. 355 is prerequisite to MUS. 356.*)

MUS. 441-442. **Music Arranging,** 2 credits.
Arranging for instrumental and vocal ensembles including chorus, band and orchestra. (*MUS. 441 is prerequisite to 442.*)

MUS. 443-444. **Counterpoint,** 2 credits.
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.
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.
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 Penderecki. The music of contemporary American composers. **Prerequisite:** Permission of instructor.

MUS. 464. **Piano Literature from 1750 to the early 20th Century,** 2 credits.
A survey of Piano Literature from 1750 through the early 20th century. Required of piano majors in the Bachelor of Music Program. Open to other keyboard students with permission of 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.

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.

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. 499. Honors, 6 credits. Year Course.

MUS. 502. Instrumental Materials and Techniques (Summer), 3 credits.

The course is intended to meet the needs of in-service instrumental music teachers, as well as upper-level undergraduate students in music, in furthering their practical knowledge of the woodwinds, brass and percussion. Solutions to common teaching problems are emphasized, as is acquaintance with appropriate materials (methods, solos and large or small ensembles).

MUS. 510. Choral Materials and Techniques (Summer), 3 credits.

A study of the problems, materials and techniques of teaching choral music in high school.

MUS. 526. Advanced Conducting (Choral and Instrumental) (Summer), 3 credits.

Refinement of baton technique. Score reading. Specific problems selected from standard works. Practical experience with choral and instrumental groups. Prerequisites: Mus. 317, 318 or 319 or equivalent.

MUS. 530. Piano Literature, 3 credits.

An examination of representative piano works of the Classical and Romantic periods and new directions of the early years of the twentieth century.
MUS. 564. *Symphonic Literature*, 3 credits.

Symphonic Literature—A historical survey of symphonic literature concentrating primarily on major composers and compositions from Baroque to present.


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.


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 per 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.


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:* Psy 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. *Summer Workshop (Summer),* 1 credit.*

Teachers who attend the Virginia Music Workshop and Camp at Massanetta Springs and who devote a minimum of 30 hours to classes, study, and observation may earn one semester hour of graduate credit at Madison College. This credit may be used for certificate renewal or may apply toward the master’s degree. No more than six hours may be considered toward the advanced degree and these may be a combination of credit from this workshop and MuEd. 571-574, MuEd. 501 and 571-574 may be taken concurrently.

MUED. 571. *Topics in Choral Techniques and Literature (Summer),* 2 credits.*

An opportunity for the student to select a topic of special interest in the field of choral music. Available only in the summer session.

MUED. 572. *Topics in Instrumental Techniques and Literature (Summer),* 2 credits.*

An opportunity for the student to select a topic of special interest in the field of instrumental music. Available only in the summer session.

MUED. 573. *Topics in Pedagogy of Music Theory and Literature (Summer),* 2 credits.*

An opportunity for the student to select a topic of special interest in the field of teaching theory and music literature. Available only in the summer session.

MUED. 574. *Topics in Elementary School Music (Summer),* 2 credits.*

An opportunity for the student to select a topic of special interest in the field of elementary music. Available only in the summer session.

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*Teachers who attend the Virginia Music Workshop and Camp at Massanetta Springs through Madison College may earn a total of six semester hours of graduate credit by participating for three summers. In addition to the week of camp activities the student will spend the following week on the Madison College Campus in individual research and in seminars under the daily supervision of members of the graduate faculty of the Music Department. A student must select a different area of research interest in each of three summer sessions from the four courses, MuEd. 571, 572, 573, and 574. It will be advisable for each student to have determined his area of interest and possible research topics prior to camp registration.
Music for Atypical Children, 3 credits.

Study of the musical needs and capabilities of atypical children both handicapped and gifted with emphasis upon planning curricula, selecting instructional materials, and utilizing appropriate teaching techniques.

Advanced Methods and Materials for Elementary and General Music, 3 credits.

Study and laboratory work in Dalcroze, Orff and Kodaly techniques, development of learning centers, music in the allied arts, and other contemporary approaches and concerns.

**APPLIED MUSIC INSTRUCTION**

Students may begin the private study of music or continue from their present level of achievement. All who desire private lessons should confer with the Head of the Music Department before registering.

The following should guide music majors in their choice of a major performing area:

1. It is desirable that all students have at least an elementary knowledge of the piano.

2. They should have a reliable fundamental technique which will enable them to achieve adequately at least the minimum requirements given for the various major areas.

3. They should be acquainted with elementary standard technical studies and with preparatory-level literature in the major area.

All students registered for Applied Music must pass a short examination in their principal and minor areas of applied music each semester; this examination to be given by a jury of the music faculty. The jury will be concerned more with musical understanding and quality of performance rather than mere difficulty of the music.

Freshman and transfer students entering in an UNDECLARED or NON-PREFERENCE major status who desire private applied music instruction will be accommodated after declared majors in music have been scheduled. Non-music major applied instruction for two credits will be granted only if the instructor’s teaching schedule will permit it.

Each music major will be expected to perform in performance classes, seminars, and departmental recitals upon the recommendation of his applied teacher.

Applied Music numbers below pertain to all vocal, keyboard and instrumental lessons in small groups of approximately four students.

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.

Applied music numbers below pertain to all vocal, keyboard and instrumental 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); 325-326 (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.

MINIMUM REQUIREMENTS OF MAJOR PERFORMANCE AREAS

Piano

Scales, arpeggios and other technical studies to meet individual needs of the student. Works from the Baroque, Classical, Romantic, and Contemporary eras. Sightreading of simple classics and accompaniments. Graduation recital to include works from at least three of the above-mentioned eras. B.M. students must attain a higher level of technical proficiency and repertoire than B.M.Ed. students.

Voice

Building of sound vocal technique with the use of appropriate material for various stages of development. Representative standard vocal literature of all periods and styles—Art Songs, Oratorio and Opera—to be studied in English and in the original language. The literature studied is necessarily dependent upon the level of technical and music development. B.M. students must attain a higher level of technical proficiency and repertoire than B.M.Ed. students.

Organ

Students who enroll for organ must have a comprehensive piano background to the level of Bach 2-part Inventions and moderately difficult sonatas of the Classical period. Organ study will include technical exercises and repertoire of the Baroque, Classical, Romantic, and Contemporary eras. B.M. students must attain a higher level of technical proficiency and repertoire than B.M.Ed. students.

String, Woodwind, Brass and Percussion Instruments

Development of a sound performing technique through performance of representative literature and appropriate technical studies.
Instrumental students will be expected to have attained the level of Grade 5 literature as listed in the Virginia Band and Orchestra Directors Handbook for admission to the B.M. program. B.M. students must attain a higher level of technical proficiency and repertoire than B.M.Ed. students.

Music Ensembles

All music majors are required to participate in a major ensemble throughout their four years of study. Major ensembles listed below are those preceded by an asterisk. Students not majoring in music may register for the following courses, with or without credit, but all groups except Chorus require an audition, held at the beginning of the Fall term.

*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. Interested students contact Mr. Moulton in the Music Department. 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, Tchaikowsky, 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. For audition information, contact Mr. David Watkins (DM-214). 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 campus; including an annual Spring Tour. For audition information contact Mr. David Watkins (DM-214). 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 Madison College-Community Symphony Orchestra is a participating member of the American Symphony Orchestra League. Membership draws from both college 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. Interested students should contact Dr. Ben E. Wright, Music Department.
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. Students interested in this ensemble should contact Dr. Ohlsson.

COLLEGE JAZZ ENSEMBLE I AND II 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. For audition information, contact Dr. George A. West, Room DM-206. Open to all Madison College 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. Interested students should contact Dr. S. James Kurtz.

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. Contact Dr. Ben E. Wright, Music Department.

*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 Madison College. Interested students please contact Mr. Moulton, Music Department.

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. Interested students should contact Mr. John Cryder.

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.
PRACTICUM IN KEYBOARD CHAMBER MUSIC PERFORMANCE AND VOCAL ACCOMPANYING 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. keyboard 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.
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 interest 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 the student with sound principles and critical thinking, to help him acquire knowledge of the development and problems of philosophic and religious thought, and to lead him to formulate an intelligent view of the meaning and value of life in terms of his own experience.

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 religion 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 Philosophy), Phil. 350 (Philosophy of Religion), and three

Professors Callahan, Sweigart, and Thomas; Associate Professor O’Meara; Assistant Professors Wiles and Wiley.
400-level electives; Rel. 201 (Introduction to the Literature and Religion of the Old Testament) 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 Philosophy) or Phil. 341 (Modern Philosophy); and 3 electives which may include 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 Literature and Religion of the New Testament), Rel. 200 (Introduction to the Study of Religion), Rel. 210 (Religions of the World); and three electives, 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 169
MAJOR IN PHILOSOPHY AND RELIGION
(B.A. Degree)

Freshman Year

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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.

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.*


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.*


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.*


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.*


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.*


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.*

*Philosophy and Religion* 171
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.

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 Heschell 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.
DEPARTMENT OF PHYSICS

Professor Wells; Associate Professors Kribel, K. Moore, Staib, and Taylor; Assistant Professors Conway, J. Gordon, 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 major in physics with a Medical Physics concentration requires that the student complete the requirements listed above, in addition to Bio. 270 (Human Physiology), Bio. 290 (Human Anatomy), Chem. 237 (Organic Chemistry), Chem. 238 (Biochemistry), Phys. 230 (Health Physics), Phys. 338 (Nuclear Physics), and Phys. 344 (Dosimetry and Instrumentation).

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).

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 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)

Freshman Year

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<th>Course</th>
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<td>Eng. 101-102</td>
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<td>Phys. 231</td>
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Sophomore Year

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<td>Phys. 337</td>
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Junior Year

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<td>Humanities</td>
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<td>Social Science</td>
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Senior Year

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NOTE: The B.A. degree also requires 6-14 hours in Foreign Language and 3 hours in Philosophy.

Students desiring secondary teaching certificates should also minor in Secondary Education. (Consult the Teacher Certification Requirements Manual for more information.)

Students with a concentration in Medical Physics should also take Bio. 270, 290, Chem. 237, 238, Phys. 230, 338 and 344.

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.

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.

*Physics* 175
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.

176 Physics
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, 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*, 2 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. *Honor*, 6 credits. Year Course.


Concentrated study in particular areas of physics.


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.
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. 64, 66-67, 69-70, and Urban Regional Studies, described on pgs. 72-73.

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. 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.

MAJOR IN POLITICAL SCIENCE

The minimum requirement for a major in Political Science is 30 semester hours—PoSc. 225 (United States Government), PoSc. 230 (International Relations), PoSc. 300 (Political Analysis) or a Political Theory course (PoSc. 310, 315, 320, 330), PoSc. 305 (Political Research Methods), and PoSc. 306 (Applied Political Research). For the remainder of the 30 semester hours the student may choose from among the various Political Science courses offered and Soci. 360 (Modern Social Movements). A student may, upon the advice of his advisor, concentrate his course work in the American government or international areas, or pursue a general pattern of courses. All students must complete the General Studies program described on pgs. 40-41.
**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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<tbody>
<tr>
<td>Eng. 101-102</td>
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<td>Fine Arts</td>
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<td>Foreign Language</td>
<td>6-8</td>
<td>Phil. 240</td>
<td>3</td>
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<td>History</td>
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<td>PoSc. 230</td>
<td>3</td>
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<td>Political Science Electives</td>
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<td><em>Foreign Language (if needed)</em> or Electives</td>
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<td>Natural Science</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
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* See Foreign Language requirements for B.A. degree.

**MAJOR IN POLITICAL SCIENCE**  
*(B.S. DEGREE)*

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180  *Political Science & Geography*
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)

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* See Foreign Language Requirements for B.A. degree.

MAJOR IN GEOGRAPHY
(B.S. Degree)

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</table>
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, business administration, 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): BuAd. 495-496 (Business Law), PoSc. 210 (Introduction to Law and Jurisprudence), PoSc. 390 (Judicial Process), PoSc. 405 (Administrative Law), PoSc. 495 (Internship in Political Science), PoSc. 496 (Internship in Public Administration), or PoSc. 497 (Internship in Law).

Electives in the core curriculum (at least 6 hours to be selected by the student in consultation with an advisor from among the following): BuAd. 241-242 (Elementary Accounting), BuAd. 310 (Real Estate), BuAd. 316 (Legal Environment of Business), BuAd. 377-378 (Federal Income Tax Accounting), BuAd. 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 business administration 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. Business administration 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): BuAd. 241-242 (Elementary Accounting), BuAd. 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 following): BuAd. 486 (Behavioral Science and the Business Organization), Econ. 445 (Industrial Organization), Econ. 355 (Economics of Regulated Industries), Geog. 410 (Urban Geography), Geog. 475 (Introduction to Political Geography), Hist. 234 (United States History (1877 to present), Phil. 440 (Professional Ethics), BuAd. 215 (Principles of Industrial Psychology I), BuAd. 216 (Principles of Industrial Psychology II), Soci. 265 (Sociology of the Community), Soci. 470 (Urban Sociology), Comm. 329 (Business and Professional Speaking).

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 Mechtemser, 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.

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. 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.

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. 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.

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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. 250. *Sex and Politics*, 3 credits.
A study of the impact of sex on political power and influence in society, including the legacy of political theory and a survey of political movements, as well as the analysis of political socialization, political behavior as reflected in voting and leadership patterns, and participation in political decision-making bodies.

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.)

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.

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, 2 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 BUAD. 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.

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 BUAD. 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 BUAD 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.


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 nine hours of Political Science or permission of instructor and department head.

* NOTE: No more than 6 semester hours can be counted toward a degree in any combination of internships.
*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 nine hours of Political Science, or permission of instructor and department head.

*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 nine hours of Political Science, or permission of instructor and department head.

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.

POSC. 529. Problems of International Relatives, 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.

* NOTE: No more than 6 semester hours can be counted toward a degree in any combination of internships.
DEPARTMENT OF SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Dr. Jack H. Williams, Head of the Department

Professors Smith and Williams; Associate Professors Council, Geier, and Stone; Assistant Professors Bradfield, McBrian, Steele, Travers, and Whitmer; 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. 40-41) in the first years of their college career.

SOCIOLGY

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 teaching certification should consult the Teacher Certification Requirements Manual. This manual is available in each academic department and in the School of Education.

SOCIAL WORK

The major in Social Work leading to the Bachelor of Science 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. 110 (General Anthropology), Anth. 210 (Cultural Anthropology), and Anth. 227 (Introduction to Historic and Prehistoric Archaeology) 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. 227. *Introduction to Historic and Prehistoric 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. *Indian Societies of North America,* 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.


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.

ANTH. 325. *Indian Societies of Mexico and Central America,* 3 credits.

Survey of the Olmec, Toltecs, Teotihuacan, Maya, and Aztec civilizations and the factors leading to their development.

ANTH. 327. *North American Archaeology,* 3 credits.

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. *Negro 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. 490. *Special Studies in Anthropology,* 1-3 credits each semester.

This course offers students an opportunity to do independent study under staff supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

ANTH. 494. *Senior Seminar in Anthropology,* 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

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relation to the potential and problems of our society. Limited to seniors majoring in sociology and social work.

ANTH. 544. *Field Techniques in Archaeology*, 3-8 credits.

Laboratory course directed at teaching students the basic field techniques and procedures 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.


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.


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.


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.*


This 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. 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.

SOCI. 340. Individual and Social Organization, 3 credits.
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.

SOCI. 345. Work and Leisure in Contemporary Society, 3 credits.
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.

SOCI. 355. Sociology of Modernization, 3 credits.
This course will examine the changes associated with the transition from traditional to modern societies in Western and non-Western societies.

SOCI. 360. Modern Social Movements, 3 credits.
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.

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. *Prerequisite: 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 demands, values and standards of modern industrial plants and the response to same by employees. *Prerequisite: Soci. 139 or permission of the instructor.*

The family is studied in its structural aspects. Primary emphasis is upon the husband-wife, parent-child, and in-law relationships. Family behavior is related to occupational structure, religious orientation, educational patterns, and social stratification. *Prerequisite: 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 permission of the Head of the Department.)

A survey of the various research methods, including an introduction to the qualitative 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 application and utilization of inferential statistics and the computer in social research. *Prerequisite: Permission of the instructor.*

SOCI. 494. *Senior Seminar in Sociology*, 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 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 emphasis 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 personality 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.

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. 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.
The goal of the School of Business is to afford its students an opportunity to gain a thorough understanding of the organization and management of public and private enterprise, and to gain an understanding of the social, economic, and political environment in which such enterprise operates.

The School of Business includes the Department of Business Administration, Business Education/Office Administration, Distributive Education, Economics and Home Economics. Eleven baccalaureate degree programs are offered including an interdisciplinary major in Hotel-Restaurant Management and a Master of Business Administration. Scholarly research, and service to public and private organizations are fostered through the Office of Economic Services and the Center for Economic Education. A wide range of classroom, laboratory and practicum experiences provide the student with intelligent direction for life in a complex society.

DEPARTMENTS

- Business Administration . . . . Dr. Thomas C. Stanton, Head
- Business Education and Office Administration . . . . Dr. Z. S. Dickerson, Jr., Head
- Distributive Education . . . . Mr. C. B. Dix, Jr., Head
- Economics . . . . . . . . . . . . Dr. Morton Schnabel, Head
- Home Economics . . . . . . . Dr. Dorothy Rowe, Head

INTERDISCIPLINARY PROGRAM IN HOTEL-RESTAURANT MANAGEMENT

The School of Business offers an Interdisciplinary Program involving the Departments of Business Administration, Economics, Business Education and Office Administration, Home Economics and Distributive Education.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tr>
<td>Fine Arts</td>
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<td>Chem. 110</td>
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<td>Comm. 200, 222 or 226</td>
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<tr>
<td>Eng. 101-102</td>
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<tr>
<td>HE. 140</td>
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<td>HRM. 160</td>
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<td>Math. 125-205</td>
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#### Sophomore Year

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<td>BuAd. 280</td>
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<tr>
<td>Econ. 230-235</td>
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<td>HE. 280</td>
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#### Junior Year

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<tr>
<td>BuAd. 380</td>
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<td>HE. 363</td>
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<td>HRM. 325</td>
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<td>HRM. 367</td>
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<td>HRM. 368</td>
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<td>Humanities</td>
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#### Senior Year

<table>
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<th>Course</th>
<th>Credit Hours</th>
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<tr>
<td>BEOA. 330</td>
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<td>BuAd. 345</td>
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<tr>
<td>BuAd. 486</td>
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<td>BuAd. 489</td>
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<td>HRM. 460</td>
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<td>HRM. 464</td>
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<td>HRM. 468</td>
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<td>Electives</td>
<td>8</td>
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<tr>
<td></td>
<td><strong>Total:</strong>   <strong>38</strong></td>
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### Description of Courses

#### Hotel-Restaurant Management

**HRM. 160. Dimensions of the Hospitality Industry,** 2 credits.

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 up-keep.

**HRM. 367. Space Allocation, Design, and Layout of Modern Food and Lodging Facilities,** 3 credits.

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. 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.


A study of the laws of importance in operation of hotels, motels, and restaurants.
DEPARTMENT OF
BUSINESS ADMINISTRATION

Dr. Thomas C. Stanton, Head of the Department

Professor: Hinton; Associate Professors Bittel, Fox, Kosnik, Ramsey, and Stanton; Assistant Professors Bertsch, D. Hamilton, Johnson, Kroeber, LaForge, Maxwell, Miller, Rosson, and Singer; Instructors Martin, and Zimmerman.

The Department of Business Administration offers a program leading to the Bachelor of Business Administration degree with majors in Accounting, Management, Marketing, and Management Information Systems.

The Bachelor of Business Administration degree program is designed to prepare students for managerial careers in business, and, with additional course work offered by the Department of Political Science, for managerial careers in public administration.

Combinations of courses are offered which provide the student with the necessary educational background for careers associated with:

1. governmental programs affecting general economic conditions, urban and regional development patterns, environmental standards, land use policies, industry regulation, etc.;

2. international organizations concerned with economic development and trade relations;

3. the areas of labor relations, security analysis, banking, investment analysis, consulting and forecasting in business operations;

4. graduate work in the fields of business administration, public administration, and law.

CURRICULUM REQUIREMENTS

Bachelor of Business Administration

All students majoring in the B.B.A. program must complete the General Studies requirement set forth in the following pages. General Studies normally are completed during the Freshman and Sophomore years.

In addition to the General Studies requirements, all students majoring in the B.B.A. program must complete 36 hours of core requirements as set forth in the following pages. These core require-
ments are an essential common body of knowledge requisite for all students majoring in Business Administration.

In addition, each student must complete 24 hours of course work elected from one of four majors, Accounting, Management, Management Information Systems, or Marketing, as set forth in the following pages.

A summary of the B.B.A. Program Requirements is shown below:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Studies Requirements</td>
<td>43</td>
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<tr>
<td>Additional General Course</td>
<td>6</td>
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<tr>
<td>Core Requirements—B.B.A.</td>
<td>36</td>
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<tr>
<td>Major Requirements</td>
<td>24</td>
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<td>Free Electives</td>
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<td><strong>Total</strong></td>
<td><strong>128</strong></td>
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Bachelor of Business Administration Degree Program

**General Studies Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Eng. 101-102</td>
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<tr>
<td>Fine Arts</td>
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</tr>
<tr>
<td>Comm. 200</td>
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</tr>
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<td>Econ. 230-235</td>
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<td>History</td>
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<td>Humanities</td>
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<td>Math. 125</td>
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<td>Natural Science</td>
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<td><strong>Total</strong></td>
<td><strong>43</strong></td>
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Six additional hours consisting of Math. 205 and BuAd. 215 are required of students majoring in Business Administration:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Math. 205</td>
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<tr>
<td>BuAd. 215</td>
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<td><strong>Total</strong></td>
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**Core Requirements**

<table>
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<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BuAd. 201</td>
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<tr>
<td>BuAd. 241-2</td>
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<td>BuAd. 260</td>
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</tr>
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<td>BuAd. 280</td>
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<td>BuAd. 290</td>
<td>3</td>
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<tr>
<td>BuAd. 303</td>
<td>3</td>
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<tr>
<td>BuAd. 316 or 495</td>
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<td>BuAd. 345</td>
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<td>BuAd. 486</td>
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<tr>
<td>BuAd. 487</td>
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<tr>
<td>Econ. (300 or 400 level)</td>
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**Major Requirements**

24 Hours

**Free Electives**

19 Hours
### ACCOUNTING MAJOR

<table>
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<th>Courses</th>
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<tr>
<td>BuAd. 343-344</td>
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<tr>
<td>BuAd. 375</td>
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<tr>
<td>BuAd. 377</td>
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<tr>
<td>BuAd. 410</td>
<td>3</td>
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<tr>
<td>BuAd. 445</td>
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<tr>
<td>BuAd. 496 (Prerequisite: 495)</td>
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...and one of the following courses:

<table>
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<tr>
<th>Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BuAd. 376</td>
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<tr>
<td>BuAd. 378</td>
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<tr>
<td>BuAd. 415</td>
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<td>BuAd. 450</td>
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**Total 6**

### MARKETING MAJOR

<table>
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<tr>
<td>BuAd. 382</td>
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<tr>
<td>BuAd. 386</td>
<td>3</td>
</tr>
<tr>
<td>BuAd. 400</td>
<td>3</td>
</tr>
<tr>
<td>BuAd. 485</td>
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<tr>
<td>BuAd. 489</td>
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...plus any three additional courses offered by the Dept. of Bus. Adm.

**Total 9**

### MANAGEMENT INFORMATION SYSTEMS MAJOR

<table>
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<th>Hours</th>
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<tr>
<td>BuAd. 307</td>
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<tr>
<td>BuAd. 341 or Math. 421</td>
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<td>BuAd. 324</td>
<td>3</td>
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<tr>
<td>BuAd. 407</td>
<td>3</td>
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<tr>
<td>BuAd. 454</td>
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<tr>
<td>BuAd. 467</td>
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</table>

...and any two additional courses offered by the Dept. of Bus. Adm.

**Total 6**

### MANAGEMENT MAJOR

<table>
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<th>Courses</th>
<th>Hours</th>
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<td>BuAd. 489</td>
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<tr>
<td>BuAd. 491</td>
<td>3</td>
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</table>

...and any 5 additional courses offered by the Dept. of Bus. Adm.

**Total 15**

### MINOR IN BUSINESS ADMINISTRATION

The minimum requirement for a minor in Business Administration is 18 hours consisting of BuAd. 241 (Elementary Accounting), BuAd. 260 (Marketing Fundamentals), BuAd. 280 (Principles of Management), BuAd. 345 (Managerial Finance), and BuAd. 316 or BuAd. 495 (Legal Environment of Business or Business Law I) and Econ. 230 or Econ. 235 or Econ. 220 (Principles of Economics or Survey of Economics).

### Description of Courses

#### Business Administration

**BUAD. 201. Computer Applications, 3 credits.**

For course description, see BEOA. 201.

**BUAD. 215. Principles of Industrial Psychology I, 3 credits.**

A basic introduction to psychology in industrial settings. Content includes worker efficiency, selection of employees, placing and training employees, and organizational management.

*Business Administration* 205
BUAD. 216. **Principles of Industrial Psychology II**, 3 credits.
Motivation of workers, communications, leadership, work groups, hierarchical organization and unionization.

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.

BUAD. 260. **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.

BUAD. 280. **Principles of Management**, 3 credits.
Principles of business management, decision processes, management functions, business resources and government.

Introduces probability distributions used in sampling techniques, statistical inference and hypothesis testing; the concepts of confidence limits and correlation analysis; and methods of trend fitting for predictive purpose as employed in business decisions and economic research. **Prerequisite:** 6 hours of college-level math.

BUAD. 303. **Quantitative Methods for Business**, 3 credits.
Designed to acquaint students with decision-making procedures involving marginal analysis, linear and non-linear programming, demand and production functions, input-output, analysis, game theory and decision theory. **Prerequisite:** BuAd. 290.

Introduction to management information systems; computer role in MIS; planning, programming and implementation of MIS; MIS systems concepts and decision making. **Prerequisite:** BuAd. 201.

BUAD. 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.

BUAD. 315. **Psychology of the Consumer**, 3 credits.
Fundamental knowledge of the psychological principles underlying consumer behavior. **Prerequisite:** Permission of the instructor.

BUAD. 316. **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.

BUAD. 320. **Safety and Health Management**, 3 credits.
Designed to provide a knowledge of the Occupational Safety and Health Act and other pertinent Federal and State legislation. Topics covered will relate to management’s objectives, responsibilities, and organization to properly administer and cost adequate safety and health programs.

206 Business Administration
BUAD. 324.  COBOL Programming Language. (3, Open Lab), 3 credits.
  For course description, see BEOA. 324.

BUAD. 341.  Assembler Language Programming for Business, 3 credits.
  For course description, see BEOA. 341.

BUAD. 343-344.  Intermediate Accounting, 6 credits.
  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: BuAd. 241-242.

BUAD. 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: BuAd. 241.

BUAD. 350.  Principles of Insurance, 3 credits.
  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.

  For course description, see BEOA. 354.

BUAD. 366.  Public Personnel Administration, 3 credits.
  For course description, see PoSc. 366.

BUAD. 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 fundamen-
  tals of cost accounting, cost flow, cost elements, cost classification, cost accounting cycle,
  voucher system and factory ledger. Prerequisite: BuAd. 241-242.

BUAD. 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: BuAd. 375.

  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. Prer-
  quisites: BuAd. 241-242.

  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: BuAd.
  377.
BUAD. 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: BuAd. 260.

BUAD. 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.

BUAD. 386. *Transportation and Distribution*, 3 credits.

A study of the modes of transportation and other functional processes within a physical distribution system. The system's approach to physical distribution is stressed, and elementary quantitative tools of physical distribution management are introduced. Prerequisite: BuAd. 260.

BUAD. 387. *Personal Selling and Sales Management*, 3 credits.

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: BuAd. 260.

BUAD. 400. *Advertising*, 3 credits.

A survey of all forms of advertising; economic aspects of advertising, layout, campaigns, media, and government control. Prerequisite: BuAd. 260.

BUAD. 405. *Administrative Law*, 3 credits.

For course description, see PoSc. 405.

BUAD. 407. *Systems and Data Base Design and Management*, 3 credits.

Emphasizes data base file justification, creation, design, maintenance and report preparation. Prerequisite: BuAd. 307.

BUAD. 410. *Auditing*, 3 credits.

Study of the work of the accountant in investigating, interpreting, and appraising accounting records. Prerequisites: BuAd. 343-344.

BUAD. 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.

BUAD. 414. *RPG Programming Language*, (3, Open Lab), 3 credits.

For course description, see BEOA. 414.

BUAD. 415. *Automated Accounting*, 3 credits.

Designed for analyzing business systems and the conversion of record keeping to automation with emphasis on forms designing and basic systems communications.


A basic understanding of the psychological principles which explain why individuals and organizations function. Prerequisites: Psyc. 231-232 or BuAd. 215 or 216.


For course description, see PoSc. 420.
**BUAD. 425. Risk Management, 3 credits.**

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.

**BUAD. 431. Advanced COBOL, 3 credits.**

For course description, see BEOA. 431.

**BUAD. 440. Retail Store Management, 3 credits.**

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: BuAd. 280.

**BUAD. 444. Seminar in Programming, 3 credits.**

For course description, see BEOA. 444.

**BUAD. 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: BuAd. 343-344 or permission of the Instructor.

**BUAD. 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: BuAd. 445.

**BUAD. 454. Systems Analysis, 3 credits.**

For course description, see BEOA. 454.

**BUAD. 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: BuAd. 260.

**BUAD. 464. Systems Operations, 3 credits.**

For course description, see BEOA. 464.

**BUAD. 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: BuAd. 307.

**BUAD. 475. Real Estate Valuation, 3 credits.**

The practices and procedures of real estate appraisal. Analysis of economic, social and governmental forces influencing value.

**BUAD. 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: BuAd. 345.

*Business Administration* 209
BUAD 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: BuAd. 280.

BUAD 485. Marketing Management, 3 credits.

An application of the theories and principles of management and marketing to the solution of practical problems of marketing tasks are emphasized. Prerequisite: BuAd. 260.


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: BuAd. 280 and senior standing.

BUAD 487. Business Policy, 3 credits.

Deals with the field of policy making and administration at the various levels of management, including overall company policies and departmental policies. Prerequisites: BuAd. 280 and senior standing or permission of instructor.

BUAD 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: BuAd. 280.

BUAD 490. Special Studies in Business Administration, 1-3 credits each semester.

Designed to give capable students in Business Administration an opportunity to do independent study under faculty supervision. (Admission only by recommendation of the instructor and permission of the Head of the Department.)

BUAD 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.

BUAD 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.

BUAD 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.

BUAD 496. Business Law II, 3 credits.

A continuation of Business Law 495, with emphasis on the law of partnerships, corporations, insurance, and government regulation of business. Prerequisite: BuAd. 495.

BUAD 505. Fundamentals of Business Law, 3 credits.

Accelerated study of business law principles. Prerequisite: Permission of Instructor.

210 Business Administration
BUAD. 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.


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.


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.


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.

BUAD. 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.

BUAD. 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: BuAd. 574 or equivalent.
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 (2) office management 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 and Office Management 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)

**GENERAL STUDIES**

<table>
<thead>
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<th>Course</th>
<th>Credit Hours</th>
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<tr>
<td>History</td>
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<td>Fine Arts</td>
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<tr>
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212 Business Education & Office Administration
## CORE COURSES

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<td>BEOA. 320</td>
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<td>BuAd. 241-242</td>
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## SPECIALIZED REQUIREMENTS

### General Office Procedures

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### Stenography

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<td>BEOA. 223-224</td>
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### Accounting—Data Processing

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<td>BEOA. 324</td>
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In addition to the General Studies and academic 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.

## Four-Year Program (B.S. Degree) in Office Administration (128 Credits)

### NON-TEACHING

#### General Studies

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#### Core Courses

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<td>BEOA. 320</td>
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Secretarial

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Data Processing

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<td>BEOA. 444</td>
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<tr>
<td>BEOA. 431</td>
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<td>BEOA. 444</td>
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<td>BEOA. 464</td>
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Business Education—Office Administration

MINORS

A minor in Business Education and Office Administration consists of 18 hours of required and elective courses.

Data Processing

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Secretarial

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<td>BEOA. 121</td>
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Office Management

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<td>BEOA. 400</td>
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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.

BEOA. 131. Elementary Typewriting, 3 credits.
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. 223-224. Advanced Shorthand, 3 credits each.
A complete review of Gregg Shorthand theory, plus additional emphasis on phrasing, enlargement of vocabulary, speed in writing and transcribing. A dictation speed of one hundred 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. 233. Advanced Typewriting, 3 credits.
Emphasis is placed on speed, accuracy, and production techniques in the typewriting 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. 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. 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).

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. 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 BuAd. 201, or equivalent.

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 BuAd. 201 or equivalent.

**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.

**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. **Prerequisites:** BEOA. 201 and one of the following: 324, 354, 414, or 431.

**BEOA. 464. Systems Operation**, 3 credits.

Organization and management of a data processing center. **Prerequisite:** BEOA. 201.

**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. 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 Business Education**, 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 Automated Data Processing**, 3 credits.

Basic understanding of data processing, including extensive readings in the entire field.
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 his position is similar to a training director in business and industry.

The Distributive Education curriculum is closely associated with the business administration department thus providing student 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 Madison College 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., HB-15, Harrison Hall Annex.
Four-Year Program (B.S. Degree) in Distributive Education (128 Credits)

### GENERAL STUDIES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Eng. 101-102</td>
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### SPECIALIZED REQUIREMENTS

**DISTRIBUTIVE EDUCATION**

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<td>DE. 485</td>
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**CORE COURSES**

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<td>Hth. 270</td>
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<td>Math. 106</td>
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<tr>
<td>Electives</td>
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### 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.

*Distributive Education* 219
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.

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 and Marketing.
DEPARTMENT OF ECONOMICS

Dr. Morton Schnabel, Head of the Department

Professors Carrier, Hall, Hanlon, Kipps, and Zahn; Associate Professors Kohen, Mickelsen, Prince, Schnabel, Varghese, and Wilhelm; Assistant Professors Bopp and Sheehan.

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.

Economics 221
## MAJOR IN ECONOMICS

### (B.A. Degree)

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
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<tr>
<td>Principles of Economics (Econ. 230-235 or Econ. 220-225)</td>
<td>6</td>
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<tr>
<td>Macroeconomics (Econ. 320, 326, 330, 425 or 430)</td>
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<tr>
<td>Microeconomics (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>
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**Total Hours:** 33

### (B.S. Degree)

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<td>Macroeconomics (Econ. 330, 425 or 430)</td>
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<td>Microeconomics (Econ. 335 or 384)</td>
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<tr>
<td>Statistics (Econ. 290)</td>
<td>3</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>18</td>
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</table>

**Total Hours:** 33

Additional requirement: Math. 125 and Math. 205

### Description of Courses

#### Economics

**ECON. 220. 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. 230 or Econ. 235.


The study of contemporary American microeconomic problems and issues of a national and multi-national scope. **Prerequisite:** Econ. 220. (Not recommended for Economics majors, not open to students who have had Econ. 230 or Econ. 235.)

**ECON. 230. 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. 220 or Econ. 225.

**ECON. 235. 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. 220 or Econ. 225.


For course description, see BuAd. 290.
ECON. 301 (240)*  *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 (352)*  *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 BuAd. 303.

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 marriage contract will be examined. Some emphasis will be placed on the empirical and theoretical explanations of wage differentials between the sexes. *Prerequisites: 3 credits in Economics.*

ECON. 310. (478)*  *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. (477)*  *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. (488)*  *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. 230-235 or Econ. 220-225.*

* Course number in previous catalogs.
ECON. 326. (375)* 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. 230-235 or Econ. 220-225.


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. 230-235 or Econ. 220-225.

ECON. 335. (330)* Intermediate Economics Theory–Price & Distribution, 3 credits.

Intermediate analysis of the determination of price, resource allocation and product distribution in a free enterprise economy. Prerequisite: Econ. 230-235 or Econ. 220-225.

ECON. 340. (300)* 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. 230-235 or Econ. 220-225.

ECON. 341. (376)* 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. 230-235 or Econ. 220-225.

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. 230-235 or Econ. 220-225.

ECON. 355. (325)* 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. 230-235 or Econ. 220-225.

ECON. 360. (314)* 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. 230-235 or Econ. 220-225.

ECON. 365. (410)* 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. 230-235 or Econ. 220-225.

* Course number in previous catalogs.

224 Economics
   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. 230-235 or Econ. 220-225.

ECON. 372. (460)* 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. 230-235 or Econ. 220-225.

ECON. 384. Mathematical Economics, 3 credits.
   Course employs techniques of differentiation and integration for microeconomic and
   macroeconomic analysis at the intermediate level. Prerequisites: Econ. 230-235 or Econ.
   220-225 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. 230-235 or Econ. 220-225 and
   Econ. 290, BuAd. 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. (470)* 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. (324)* 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 BuAd. 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

* Course number in previous catalogs.
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, 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. Prerequisite: Econ. 370 or permission of instructor.

ECON. 475. (380)* 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, or 384.

ECON. 480. Senior Seminar in Economics, 3 credits.
Relates economic theory to contemporary issues. It is designed for the economics major about to graduate, and is intended to prepare him to apply his knowledge of economics to the real world problems he is about to face. Within the economic framework, each student is afforded the opportunity to work on the specific subject of his choice. Prerequisite: 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 BuAd. 506.

ECON. 524. Economic Analysis, 3 credits.
Analysis and synthesis of micro and macro economic concepts.

* Course number in previous catalogs.

226 Economics
DEPARTMENT OF
HOME ECONOMICS

Dr. Dorothy Rowe, Head of the Department

Professors M. Christiansen, J. Kilpatrick, and Rowe; Associate Professor Emerson; Instructor McDearmon.

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)

<table>
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<th>Sophomore Year</th>
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<td>History</td>
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<td>Hist. 233 or 234</td>
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### Sophomore Year

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<td>Electives</td>
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### MAJOR IN DIETETICS

(B.S. Degree)

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<td>Math. 105-106</td>
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<td>HE. 280</td>
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<td></td>
<td>31</td>
<td>Soci. 139 or 250, or Anth. 210</td>
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</table>
### 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

<table>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Bio. 100</td>
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<td>Comm. 200, 222 or 226</td>
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<tr>
<td>Chem. 110</td>
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<td>Fine Arts</td>
<td>3</td>
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<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Hist. 233 or 234</td>
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<td>HE. 110</td>
<td>3</td>
<td>Humanities</td>
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<tr>
<td>HE. 133</td>
<td>3</td>
<td>HE. 255</td>
<td>3</td>
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<td>HE. 140</td>
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<td>HE. 280</td>
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<td>Psyc. 233-234</td>
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<td>HE. 384</td>
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<td>HE. 300</td>
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<td>HE. 370</td>
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<td>Electives</td>
<td>6</td>
<td></td>
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</tr>
</tbody>
</table>

|                | 32          |                     | 31          |

Home Economics 229
## CONCENTRATION: DRESS DESIGN

### Freshman Year
- Art 200 or 201: 3
- Bio. 100: 4
- Eng. 101-102: 6
- HE. 100: 1
- HE. 110: 3
- HE. 133: 3
- HE. 140: 3
- HE. 215: 6
- Mathematics: 32
- Mathematics: 6
- **Total Credit Hours:** 32

### Sophomore Year
- Art 140: 3
- Art 150: 3
- Chem. 110: 4
- Comm. 200, 222 or 226: 3
- Econ. 220 or 230: 3
- Humanities: 6
- HE. 280: 3
- HE. 290: 3
- Soci. 139 or 250: 3
- Physical Education: 2
- **Total Credit Hours:** 33

### Junior Year
- BuAd. 260: 3
- History: 6
- HE. 250: 3
- HE. 255: 3
- HE. 310: 3
- HE. 320: 3
- Psyc. 231: 7
- Electives: 31
- **Total Credit Hours:** 31

### Senior Year
- Comm. 329: 3
- HE. 305: 3
- HE. 330: 3
- HE. 350: 3
- HE. 355: 3
- HE. 490: 3
- HE. 495: 2
- HE./SeEd. 303: 3
- SpEd. 365: 3
- Electives: 5
- **Total Credit Hours:** 31

## CONCENTRATION: FAMILY SERVICES (EXTENSION)

### Freshman Year
- Bio. 100: 4
- Chem. 110: 4
- Eng. 101-102: 6
- HE. 100: 1
- HE. 110: 3
- HE. 133: 3
- HE. 140: 3
- Mathematics: 6
- Physical Education: 2
- **Total Credit Hours:** 32

### Sophomore Year
- Comm. 200, 222 or 226: 3
- Econ. 220 or 230: 3
- Fine Arts: 3
- Humanities: 6
- History: 6
- HE. 215: 3
- HE. 255: 3
- HE. 280: 3
- Psyc. 231: 3
- **Total Credit Hours:** 33

### Junior Year
- HE. 250: 3
- HE. 290: 3
- HE. 300: 3
- HE. 320: 3
- HE. 343: 3
- HE. 370: 3
- HE. 375: 3
- HE. 378: 3
- Soci. 139 or 250: 5
- Electives: 32
- **Total Credit Hours:** 32

### Senior Year
- Comm. 329: 3
- HE. 305: 3
- HE. 330: 3
- HE. 350: 3
- HE. 355: 3
- HE. 490: 3
- HE. 495: 2
- HE./SeEd. 303: 3
- SpEd. 365: 3
- Electives: 5
- **Total Credit Hours:** 31

230 Home Economics
### CONCENTRATION: FASHION MERCHANDISING

#### Freshman Year

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<td>Mathematics</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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#### Senior Year

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### CONCENTRATION: INTERIOR DESIGN

#### Freshman Year

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<td>Chem. 110</td>
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<td>Mathematics</td>
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<td>Physical Education</td>
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#### Sophomore Year

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<td>Econ. 220 or 230</td>
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<td>History</td>
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**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.


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.


Basic nutrition as a component of contemporary life.
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, businessess 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,
marrige, 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, 3), 3 credits.
The principles of quantity food production and service are studied. Prerequisites: HE.
140, HE. 280 or equivalent. Offered in alternate years.

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.

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 genetic 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. *Prerequisites: HE. 280, physiology 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.*

HE. 385. *Nutrition and Diet Therapy*, 4 credits.

The science and application of the principles of nutrition used in dietary planning for various age groups in health and in illness. Open only to nursing students.


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 fashion. 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 standard food products. *Prerequisites: HE. 140 and organic chemistry or the equivalent.*

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 equivalent. Offered in alternate years.*

HE. 490. *Special Studies in Home Economics* (1, 2-6), 1-3 credits each semester.

Capable students may elect to do independent study in an area of home economics under faculty supervision. (Offered only with the consent of the Head of the Department.)
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.  **Practicum in Merchandising** (1, 20), 8 credits.
Practical experience in retail merchandising will be offered in retail stores under the direction and supervision of a Home Economics faculty member. Experiences will include selling, advertising, buying, promotion, customer accounts, and employee management. Weekly contact with instructor and 20 hrs. work experience. Readings, a buying trip, and completion of several projects required. When this course is taken on an eight week block, it is scheduled for 2 hours conference and 40 hours on the job per week. No other courses should be taken with this arrangement. *(Offered only with the consent of the Head of the Department.)* Prerequisite: HE. 493 or equivalent.

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.

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.

HE. 480.  **Directed Teaching in Home Economics**, 8 credits.
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.

*Home Economics* 235
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, and the Anthony-Seeger Campus School 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 to function effectively in his profession and his society.

DEPARTMENTS

Elementary and Early Childhood Education ... .Dr. Charles W. Blair, Head
Secondary Education and School Administration ... .Dr. William D. Smith, Acting 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
Special Education
Speech Pathology and Audiology

PROFESSIONAL EDUCATION SEQUENCE

The School of Education of Madison College recognizes that research has defined what characteristics the competent teacher exhibits. Research indicates that the dimensions of (a) personal charac-
teristics, (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 selected area of study as to the developmental level of the school child he chooses to work with.

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 a student can decide for himself whether working with children is his desired role or not, and if so, with children at what level.

238 Education
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 college supervisors the student is provided activities designed to familiarize him 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 Madison College 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 Madison College 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 College. For admission to Directed Teaching, a student must possess an overall 2.00 point average (C) and a 2.00 average in his 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 College 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 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.

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.)

<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>Eng. 101-102</td>
<td>6</td>
<td>Art 310</td>
<td>3</td>
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<tr>
<td>Geog. 120</td>
<td>3</td>
<td>Comm. 200, 222 or 226</td>
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<td>History</td>
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<td>Econ. 220</td>
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<td>Math. 107-108</td>
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<td>MuEd. 375</td>
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<td>ElEd. 356</td>
<td>Read. 439</td>
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<td>ElEd. 358</td>
<td>Educ. 470</td>
<td></td>
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<tr>
<td>Read. 359</td>
<td>Educ. 480 (Lib. Sci.)</td>
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<td>Educ. 360</td>
<td>Educ. 480 (4-7)</td>
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<td>Hist. 233 or 234</td>
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<td>**LSEM. 482</td>
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<td>LSEM. 354</td>
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<tr>
<td>Sci. 310</td>
<td>33</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

The Anthony-Seeger Campus School, located on the Madison College campus, opened its doors for the first session in September, 1958. The school is named for two former faculty members of the college—Miss Katherine Miner Anthony and Miss Mary Louise Seeger. Classrooms are provided for nursery, kindergarten, and grades one through six. This school complex houses a library, a modern cafeteria, a playroom-gymnasium, and an auditorium which seats 250.

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 Anthony-Seeger Campus School is an integral part of the School of Education and provides a site for practicum experiences for Madison College students in the professional education sequence, as well as an experimental center for innovative teaching styles and strategies.
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 College.

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 performance and assists him 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 College 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 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.

All practicum sites involving either observation or participation experiences are arranged through the Office of Student Teaching. This allows College 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:

244 Education
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 been approved for student teaching by an advisor and department chairman.

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.

Additionally, 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 Psyc. 233, Educ. 360, EIEd. 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.

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, 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. Neatrour, and Scherwitzky; Associate Professors Merlin and Reeke; Assistant Professors Bender, Davis, M. Dickerson, Hopkins, Leonard, Muia, and Shaffer.

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 Education should consider enrolling in a course in statistics and a course in mental tests and measurements. These courses should be selected after consultation with the major advisor.
### Freshman Year

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<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Eng. 101-102</td>
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<td>Math. 107-108</td>
<td>6</td>
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<td>History</td>
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<td>Fine Arts</td>
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<tr>
<td>*Natural Sciences</td>
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<td>Physical Education</td>
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<td>Humanities</td>
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### Sophomore Year

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<td>Econ. 220</td>
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<td>Hth. 370</td>
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<td>LSEM. 240</td>
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### Junior Year

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<td>Art 310</td>
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<td>Educ. 360</td>
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<td>MuEd. 375</td>
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<td>Sci. 310</td>
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<td>ElEd. 390</td>
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### Senior Year

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<td>Educ. 470</td>
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<td>Educ. 480</td>
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<td><strong>Total</strong></td>
<td><strong>31</strong></td>
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</table>

* Include two different areas selected from the following: biology, chemistry, physics, geology.

### 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.
### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ElEd. 356</td>
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<td>Educ. 360</td>
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<td>Psyc. 369</td>
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<td>ECEd. 385</td>
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<td>ECEd. 406</td>
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<td>Sci. 310</td>
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<td><strong>Total</strong></td>
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### Senior Year

<table>
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<th>Credits</th>
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<td>Educ. 480 (Primary)</td>
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<td>Educ. 480 (Kindergarten)</td>
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<td><strong>31</strong></td>
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</table>

* 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.

- ECEd. 541 3 credits
- ECEd. 542 3 credits
- Educ. 480 (Child Care Centers) 8 credits

### Description of Courses

#### Early Childhood

**ECEd. 385. Laboratory in Child Study (2, 2), 3 credits.**

Deals with collection, recording, and analyzing of data about children and its application. Students observe and participate in Early Childhood Education Programs. **Prerequisite:** Psyc. 369 or equivalent.

**ECEd. 401. Problems in Early Childhood Education, 3 credits.**

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.

**ECEd. 490. Special Studies in Early Childhood Education, 1-3 credits.**

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. 541. Working with Parents of Young Children, 3 credits.

Teacher's role in parent and family life education and methods by which parent-teacher cooperation and coordination of effort are achieved. Current research in parent education is reviewed and the selection and evaluation of materials for use with parents is 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.

(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. 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.

250 Elementary & Early Childhood Education
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*.

(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. 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.*


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.)
DEPARTMENT OF SECONDARY EDUCATION AND SCHOOL ADMINISTRATION

Dr. William D. Smith, Acting Head of the Department

Professors Fox, Lehman, and Roberson; Associate Professors Finlayson, Graham, Liles, Moore, Roller, Smith, and Stewart; Assistant Professors Joyce, and Wiley.

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 requirements and receipt of the baccalaureate degree.

A methodology sequence (Clinical Techniques) is required and should be taken immediately 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.

Students desiring secondary certification must also complete Hth. 270 (Elements of Health Promotion) and Hist. 233 or 234 (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 special programs and elective courses in the Department. The student is required to consult his career (minor) advisor during the first semester of
the Sophomore year. By consulting regularly with his career advisor in Secondary Education, the student can continually evaluate his 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 retention in teacher education. Staff members will submit a written report on such students to the Head of the Department of Secondary Education, and the Department Head will forward these reports to the student’s career advisor in Secondary Education. The student’s career advisor will review the reports of all of his advisees near the end of their sophomore year and during their junior and senior years. He will forward all unfavorable reports concerning individual students to the School of Education screening committee for their consideration and action.

A minimum of 22 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>Senior Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SeEd. 101 (elective)</td>
<td>1</td>
<td>Required—Clinical Methodology Sequence (See preceding page) *</td>
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</tr>
<tr>
<td>Sophomore Year</td>
<td></td>
<td>Educ. 480 (required)</td>
<td>8</td>
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<tr>
<td>Psyc. 233-234 (required)</td>
<td>6</td>
<td>Educ. 470 or 471 (required)</td>
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</tr>
<tr>
<td>Junior Year</td>
<td></td>
<td>LSEM. 487 (elective)</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 360 (required)</td>
<td>3</td>
<td>SeEd. 490 (elective)</td>
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</tr>
<tr>
<td>SeEd. 365 (elective)</td>
<td>3</td>
<td>LSEM. 488 (elective)</td>
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</tr>
<tr>
<td>SeEd. 381 (elective)</td>
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<td>SeEd. 401 (elective)</td>
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<td>Educ. 536 (elective)</td>
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<tr>
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<td>Educ. 520 (elective)</td>
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<tr>
<td></td>
<td></td>
<td>SeEd. 550 (elective)</td>
<td>3</td>
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</tbody>
</table>

Students desiring secondary certification must also complete Hth. 370 (The School Health Program) and Hist. 233 or 234 (United States History).
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.


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. Prerequisite: Educ. 360. Special department head approval is required for enrollment.

SEED. 371 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. Prerequisite: Educ. 360. Career (minor) advisor approval is required.

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.

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./HE. 303. Clinical Techniques—Home Economics Education Methods, 3 credits.

254 Secondary Education & School Administration
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. Prerequisites: Educ. 360 and SeEd. Methodology Sequence.

SEED. 401. Problems in Secondary Education, 1-3 credits.

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.

SEED. 533. Teaching Mathematics in the Secondary School, 3 credits. (Summer only).

Individual and group study of content, methodology, and instructional materials essential to the design and implementation of effective instructional programs in modern mathematics.

SEED. 537. Teaching Science in the Secondary School, 3 credits.

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.

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.


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. Prerequisite: Educ. 360 or equivalent.

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.

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 with all aspects of the classroom teacher's role. Prerequisites: Psyc. 233-234, EEd. 369, Educ. 360 and SeEd. 370 or equivalent 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. 536. Teaching in Multi-Ethnic Schools, 2-3 credits.
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.)
DEPARTMENT OF LIBRARY SCIENCE AND EDUCATIONAL MEDIA

Dr. Raymond C. Ramquist, Head of the Department

Professors Haban and Palmer; Associate Professors Barrette and Ramquist; Assistant Professors Blankenburg, Dubenezic, and Steinberg; Instructor Ramsey.

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.

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 28 semester hours from the department to include LSEM. 240, 340, 354, 365, 366, 488 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**


Designed to acquaint students with college library resources and to offer guided experiences in their use in the research process.


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.


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.*

Principles and procedures in selection and evaluation of audio-visual materials, production of simple materials, techniques for using these teaching materials in the classroom, laboratory experience in the operation of equipment, and previewing materials available for use in the public schools.

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.

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.

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. 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 standards 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.

*Library Science & Educational Media* 259
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. 523. **Communications Theory in Library Media Systems**, 3 credits.

The library as an agency of communication throughout history. Emergence of a broader role for libraries in the totality of human communications, with their increasing attention to dynamic as well as static communications. Growth of school library media services exemplifying this changing role.

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 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.
DEPARTMENT OF PHYSICAL AND HEALTH EDUCATION

Dr. Marilyn Crawford, Head of the Department

Professors Bruce, Crawford, E. Miller, and Morrison; Associate Professors Hurt, Love, R. Martin, Rader, and Rummel; Assistant Professors Arnold, Campanelli, Ehlers, Geil, J. Haynes, Harris, M. Horn, Jaynes, H. Kruger, J. Kruger, N. Mills, O’Donnell, Schell, Travis, Vanderwarker, and Vedelli; Instructors Arbogast, Babcock, Balog, Dalton, Feldman, Lester, Luce, McMillin, Prince, Wisler, and Witt; Adjunct Associate Professor Torkelsen.

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

Three options are available to the person who wishes to major in health science; (1) the basic health science program, (2) the community health program, and (3) the school health program. 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 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 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.

MINOR PROGRAMS

The following minor programs are available to all students and may be combined with any teaching or non-teaching major in the College.

Aquatics

The aquatics minor consists of 24 hours, including PE. 264 (Lifesaving ARC/YMCA), PE. 365 (Lifeguard Training), PE. 366 (Aquatic Instructor Training-ARC/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 Theatre Forms of Dance), PE. 346 (Dance in the Theatre), PE. 349 (History of Dance); six semester hours from Modern Dance Technique (PE. 140 A, B; 240; 340; 245; 246); 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.

Physical & Health Education 263
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 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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<thead>
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<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
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<tr>
<td>Bio. 100</td>
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<td>Eng. 101-102</td>
<td>6</td>
<td>Comm. 200, 222 or 226</td>
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<td>Math. 105 or 135; 220</td>
<td>6</td>
<td>PE. Technique/Survey</td>
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<td>PE. 283</td>
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<td>Concentration</td>
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<td>PE. Technique/Survey</td>
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<td>Fine Arts</td>
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<td>Humanities</td>
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<tr>
<td>Physical Education</td>
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<tr>
<td>Social Science</td>
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### Major in Physical Education (Teaching: N-7)

**Freshman Year**

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<th>Credit Hours</th>
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<tbody>
<tr>
<td>Bio. 100</td>
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<td>Bio. 270-290</td>
<td>7</td>
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<tr>
<td>Eng. 101-102</td>
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<td>Comm. 200, 222, or 226</td>
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<td>Math. 105 or 135; 220</td>
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<td>Hth. 204</td>
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<td>PE. 260</td>
<td>2</td>
<td>Hist. 233 or 234</td>
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<td>PE. 255</td>
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<td>PE. 271-272</td>
<td>4</td>
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<td>PE. 351</td>
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<td>Fine Arts</td>
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<td>PE. Technique/Survey</td>
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<td>Natural Science</td>
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<td>Psyc. 233-234</td>
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<td>Social Science</td>
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<td>Hist. (non-U.S.)</td>
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**Junior Year**

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<tr>
<td>Educ. 360</td>
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<td>Educ. 470 or 471</td>
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**Senior Year**

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### Major in Physical Education (Teaching: 7-12)

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Physical & Health Education 265
### MAJOR IN HEALTH SCIENCE (SCHOOL HEALTH)

#### (B.S. Degree)

**Freshman Year**

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266  Physical & Health Education
### MAJOR IN HEALTH SCIENCE (COMMUNITY HEALTH)  
(B.S. Degree)

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### MAJOR IN HEALTH SCIENCE (BASIC PROGRAM)  
(B.S. Degree)

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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 College Physician and permission of the Head of the Department.

PE. 120-138. Elementary Sports* (0, 4), 2 credits.

Elementary level in specific individual and team sports: 120—Team Sports for Women; 121—Team Sports for Men; 122—Cycling; 123—Personal Defense; 125—Tennis; 126—Golf; 127—Archery; 128—Fencing; 129—Badminton; 131—Skiing; *133—Bowling; *134—Equitation; 135—Volleyball; 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; 140—A. B—Modern; 141—Square and Round; 142—Ballet; 143—Folk and Social; 144—Weight Training; 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. 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.

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.

* 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, $250.00. The College reserves the right to cancel any class should suitable facilities be unavailable and to alter prices in the event of unusual inflation.

268 Physical & Health Education
Intermediate Sports (0, 4), 2 credits.

Intermediate level in specific individual and team sports: 223—Basketball; 224—Hockey; 225—Tennis; 226—Golf; 227—Archery; 228—Fencing; 229—Badminton; 230—Wrestling; 232—Flag Football; 233—Bowling (Prerequisite: average HO); 234—Equitation; 235—Volleyball; 236—Softball; 238—Soccer.

Intermediate Dance (0, 4), 2 credits.

Intermediate level in specific types of dance: 240—Modern; 241—Square and Round; 242—Ballet; 243—Folk; 244—Social. Prerequisite: Elementary level or equivalent of the respective dance forms.

Dance Improvisation (0, 4), 2 credits each semester. Year Course.

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.

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.

Repertory—Notation (0, 4), 2 credits.

The study and use of various systems of notating movement. Prerequisite: Dance experience and approval of the instructor.

Advanced Campcraft (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.

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.

Intermediate Gymnastics (0, 4), 2 credits.

Intermediate level performance using floor and hand apparatus.

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.

Survey of the Theatre Forms of 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.

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, $250.00. The College reserves the right to cancel any class should suitable facilities be unavailable and to alter prices in the event of unusual inflation.
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. 264. *Lifesaving ARC/YMCA* (0, 3), 1 credit.
Two nationally recognized lifesaving programs—American Red Cross and YMCA. Successful completion of the course leads to certification in both programs.

PE. 267. *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 "drown-proofing" 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-Baseball; 271—Tumbling-Apparatus; 272—Gymnastics-Track and Field; 273—Soccer.

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.

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. 320-339. *Intercollegiate Sports* (0, 3), 1 credit.
Advanced level of skill and strategy, including competition during a full season on the intercollegiate team: 320—Gymnastics; 321—Track and Field; 322—Cross Country; 323—Basketball; 324—Hokey; 325—Tennis; 326—Golf; 327—Archery; 328—Fencing; 330—Wrestling; 332—Football; 334—Equitation; 335—Volleyball; 337—Baseball; 338—Soccer; 339—Lacrosse. (Registration for credit must be approved by the Department Head.)

PE. 340. *Advanced Modern Dance* (0, 4), 2 credits.
Modern dance technique, improvisation, and composition on an advanced level. *Prerequisite: PE. 240 or equivalent.*

270 *Physical & Health Education*
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 in the Theatre (2, 2), 3 credits.
Analysis of selected dance art pieces with emphasis on introducing the student to the aesthetics of dance theatre in relation to sound, lighting, costuming, staging, and make-up. No prior experience in dance 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 (2, 2), 3 credits.
A lecture-studio experience organized to increase understanding of dance through a study of the development of the art from primitive times through the twentieth century utilizing historical forms and movement characteristics in the contemporary idiom.

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. Formerly PE. 381) Prerequisite: PE. 351 for Elementary Physical Education specialist section.

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).

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. 361. Intercollegiate Swimming (0, 3), 1 credit.
Advanced level of skill and strategy, including competition during a full season on the intercollegiate team. (Registration for credit must be approved by the Department Head.)

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.

Physical & Health Education 271
PE. 363. *Aquatic Sports* (0, 2), 1 credit.

Swimming strokes, diving, water stunts, synchronized swimming, games, skin diving and other water recreational activities. **Prerequisite:** PE. 260 or 267.

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.

PE. 366. *Aquatic Instructor Training—ARC and YMCA* (1, 2), 2 credits.

Students successfully completing the course may be certified in American Red Cross Basic Swimming Instructor, Water Safety Instructor and YMCA Instructor of Swimming or Lifesaving. Additional out-of-class training needed for certification. **Prerequisites:** Senior Lifesaving and advanced swimming ability.

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-Fencing-Wrestling; 376—Field Sports.

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. **Prerequisites:** 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.


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.

272 Physical & Health Education
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.

PE. 465. Construction, Design, Operation and Maintenance of Aquatic Facilities, 3
credits.
Designed to familiarize the student with all the aspects relating to design, construc-
tion, operation and maintenance of swimming pools. Consideration is given to state health
and pool codes, as pertains to pool construction and design.

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. Prerequi-
site: 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.

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./SOC1. 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. 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. 560. Evaluation and Measurement in Physical and Health Education, 3 credits.
   A study of available tests of physical fitness, motor ability, sports skills, and health
   knowledge and behaviors. Experience is provided in the use of the tests and in the
   interpretation of data.

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.

Recreation

REC. 285. Community Recreation, 2 credits.
   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.)

REC. 380. Leisure Concepts, 3 credits.
   History, philosophy; influence of recreation and leisure movements on society;
   technological, economic and community forces affecting recreation.

REC. 385. Recreation Programming, 3 credits.
   Planning, organizing and conducting recreation programs in a variety of settings and
   program fields.

274 Physical & Health Education
**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. Upon successful completion of this course and Hth. 223, students may secure an endorsement for Driver Education from the State Board of Education after graduation. *Prerequisites: Admission into a teacher education curriculum; Operator's license issued by the Commonwealth of Virginia.* (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. *Environmental Health*, 3 credits.

An investigation of environmental factors and their effects on the health of the individual, community, and society. (Formerly Hth. 320.)

*Physical & Health Education 275*
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. 370. The School Health Program, 2 credits.

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. 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. Prerequisite: Hth. 352 or equivalent. (Formerly Hth. 401.)

HTH. 435. Traffic Rules, Regulations and Law, 3 credits.

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.

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. *Prerequisites: Hth. 270, Bio. 270 and Bio. 290.*

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.*


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.


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.

*Physical & Health Education* 277
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, homes for the aged, 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.

The required courses for a major in Psychology are: Psyc. 231-232, (General Psychology) or Psyc. 233-234 (Human Growth and Development), and 28 semester hours of elective course work. All other psychology courses are elected through close faculty-student advisement. Students are strongly encouraged to meet regularly with their advisor in order to plan an appropriate program of study.

A maximum of nine hours of credit toward hours required for graduation may be earned by a student taking both Psyc. 231-232 and Psyc. 233-234. 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.

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 two graduate programs leading to the M.Ed. degree in School Psychology and in Counselor Education. Inquiries should be directed to the office of Graduate Studies or to the respective Coordinators in the Psychology Department.

THE PSYCHOLOGY REQUIREMENT FOR EDUCATION MAJORS

Students planning to teach need six semester hours of psychology courses. In order to qualify for certification at either the elementary or secondary level, students must successfully complete Psyc. 233-234, Human Growth and Development. Students majoring in Early Childhood Education will take Psyc. 233 and Psyc. 369, Psychology of Early Childhood, to meet certification requirements.

Students who have three semester hours of General Psychology may take six semester hours of Psyc. 233-234. Students who have six semester hours of General Psychology should take either Psyc. 233 or 234 and one course from Psyc. 369, Psyc. 379, or Psyc. 478. Students should consult with their advisor before selecting one of 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.

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.

MAJOR IN PSYCHOLOGY
(B.S./B.A. Degree)

<table>
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<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Eng. 101-102</td>
<td>6</td>
<td>Humanities</td>
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<tr>
<td>Fine Arts</td>
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<td>Natural Science</td>
<td>8</td>
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<tr>
<td>History</td>
<td>6</td>
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<tr>
<td>Math.</td>
<td>3</td>
<td>Electives</td>
<td>9</td>
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<tr>
<td>Psyc. 231-232</td>
<td>6</td>
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<td>Comm. 200, 222 or 226</td>
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<td>Junior Year</td>
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*Added requirements (in addition to General Studies courses) for the B.A. degree are: 3 semester hours of Philosophy and 6-14 semester hours of Foreign Language. Added requirements (in addition to General Studies courses) for the B.S. degree are: 3 semester hours in Mathematics, and either 4 semester hours in Natural Science or 3 semester hours in Social Science.
Recommended Electives for Psychology Majors Interested in Graduate Study (B.A. or B.S.)

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Psyc. 320</td>
<td>Perception and Information</td>
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<td>Processing</td>
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<tr>
<td>Psyc. 355</td>
<td>Experimental Psychology</td>
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<td>Psyc. 357</td>
<td>Psychology of Personality</td>
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<td>Psyc. 358</td>
<td>Abnormal Psychology</td>
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<td>Psyc. 359</td>
<td>Psychological Statistics</td>
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<tr>
<td>Psyc. 360</td>
<td>Physiological Psychology</td>
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<tr>
<td>Psyc. 386</td>
<td>History and Systems</td>
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<tr>
<td>Psyc. 479</td>
<td>Psychology of Learning</td>
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<tr>
<td>Psyc. 485</td>
<td>Psychology of Motivation</td>
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<td>Psyc. 487</td>
<td>Social Psychology</td>
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<td>Psyc. 488</td>
<td>Mental Tests and Measurements</td>
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<tr>
<td>Psyc. 502</td>
<td>Use of Computers in the</td>
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<td>Behavioral Sciences</td>
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<tr>
<td>Psyc. 505</td>
<td>Systems and Theories of Psychology</td>
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Recommended Electives for Psychology Majors Terminating at the Bachelor's Level (B.A. or B.S.)

**Electives**

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<tr>
<th>Course Code</th>
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<tr>
<td>Psyc. 250</td>
<td>Psychology of Adjustment</td>
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<tr>
<td>Psyc. 355</td>
<td>Experimental Psychology</td>
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<td>Psyc. 357</td>
<td>Psychology of Personality</td>
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<tr>
<td>Psyc. 358</td>
<td>Abnormal Psychology</td>
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<td>Psyc. 386</td>
<td>History and Systems</td>
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<td>Psyc. 397</td>
<td>Field Experience in Abnormal</td>
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<td></td>
<td>Psychology</td>
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<td>Psyc. 481</td>
<td>Psychology of Adult Development</td>
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<td>and Aging</td>
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<tr>
<td>Psyc. 482</td>
<td>Death and Dying</td>
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<tr>
<td>Psyc. 483</td>
<td>Principles of Behavior Modification</td>
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<tr>
<td>Psyc. 487</td>
<td>Social Psychology</td>
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<tr>
<td>Psyc. 488</td>
<td>Mental Tests and Measurements</td>
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<td>Psyc. 489</td>
<td>Community Psychology</td>
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<td>Psyc. 491</td>
<td>Modern Clinical Psychology</td>
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<td>Psyc. 506</td>
<td>Potentials of Aging</td>
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<tr>
<td>Psyc. 522</td>
<td>Advanced Abnormal Psychology</td>
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</tbody>
</table>

Description of Courses

**Psychology**

PSYC. 100. *Psychology for Students of Nursing* (Summer only), 3 credits

Open only to student nurses of the Rockingham Memorial Hospital.

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.


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.


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 and Math. 105 or equivalent; also Psyc. 359.

PSYC. 357. *Psychology of Personality*, 3 credits.

Essential elements of several leading theories of personality development with emphasis on implications of these theories for human adjustment. 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.


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 and Math. 105 or equivalent.

PSYC. 360. *Physiological Psychology*, 3 credits.

An examination of the physiological correlates which determine behavior. Prerequisites: Psyc. 231-232 or 233-234.


The psychology of the young child and philosophy and techniques of early childhood education. Prerequisites: Psyc. 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. *Prerequisites:* Psyc. 231-232 or 233-234.


Examination of the essential nature of adolescence. *Prerequisites:* Psyc. 231-232 or 233-234.


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.


The physical, social, and psychological factors faced by the adult and the progression through his life span. *Prerequisites:* Psyc. 231-233 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.


Applications of reinforcement principles in a variety of community mental health and human service occupations. *Prerequisites:* Psyc. 231-232.


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. \textit{Prerequisites: Psyc. 231-232 or 233-234.}

\textbf{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. \textit{Prerequisites: Psyc. 231-232 or 233-234.}

\textbf{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. \textit{Prerequisites: Psyc. 231-232.}

\textbf{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. \textit{Prerequisites: Written approval from advisor, project supervisor and Department Head (see guidelines).}

\textbf{PSYC. 491. Modern Clinical Psychology: Theory and Practice, 3 credits.}

An introduction to the field of clinical psychology. \textit{Prerequisites: Psyc. 231-232 or 233-234.}

\textbf{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.

\textbf{PSYC. 499. Honors, 6 credits. Year Course.}

(See catalog descriptions entitled, "Graduation With Distinction" and "Graduation With Honors").

\textbf{PSYC. 501. Workshop in Psychology, 1-3 credits.}

Designed to provide a detailed study of a particular topic of interest in psychology. \textit{Prerequisite: Permission of Head of Department.}

\textbf{PSYC. 502. Uses of the Computer in the Behavioral Sciences, 3 credits.}

The basics of computer programming with an emphasis on problems encountered by the behavioral scientist. \textit{Prerequisites: Psyc. 231-232, 233-234.}

\textbf{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. \textit{Prerequisite: Psyc. 386 or equivalent.}

\textbf{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. \textit{Prerequisites: Psyc. 231-2, or 233-4.}

\textbf{PSYC. 510. Advanced Developmental Psychology, 3 credits.}

The origins and development of behavior during the prenatal period and through adolescence. \textit{Prerequisites: Psyc. 231-232 or 233-234.}

\textbf{PSYC. 522. Advanced Abnormal Psychology, 3 credits.}

Emphasizing etiologies, symptoms and therapies of the neuroses and psychoses. \textit{Prerequisites: Psyc. 231-232 or 233-234 and 358.}

\textit{Psychology 283}
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. *Prerequisites: 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*, (Summer), 1-3 credits.

Designed to provide an intensive study of a particular topic in guidance.


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.


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.


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 and 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
SPECIAL EDUCATION

Professors Christiansen and Minskoff; Associate Professors Kidd, and Landis; Assistant Professors Finkle, Perso, and Starkey.

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 and emotionally disturbed and (2) to offer minor programs to meet the needs of students majoring in other departments. The programs of the Department of Special Education are based upon the precept that the development of exceptional individuals is optimized through their placement in the mainstream of the educational process.

MAJOR PROGRAMS

The Department has a core curriculum required of all majors. This core consists of SpEd. 340, SpEd. 370, and SpPa. 300. The core curriculum is designed to assist in meeting the primary objectives of the Department as stated above.

The Department offers major programs in Mental Retardation, and Emotional Disturbance. These programs are designed to qualify the students for the Virginia Collegiate Professional Teaching Certificate. Questions regarding a particular program should be directed to the department head.

Students majoring in Mental Retardation must take specified courses in Special Education. Completion of these courses will enable them to meet the Virginia Certification requirements to teach the mentally retarded. Students have the option to receive training in working with the severely retarded and multiply handicapped.

Students enrolled in the Emotional Disturbance program take course work which enables them to meet Virginia Certification requirements to teach the emotionally disturbed in public schools or other appropriate settings. Students have the option to receive training in working with severely disturbed children.

A key service component of the Department is the Educational Media Laboratory (EML). The EML provides ready access to a large collection of instructional materials and media. These materials/media may be borrowed by students, teachers, and other interested individuals and groups.
MINOR PROGRAMS

The minimum requirement for a minor in general special education is 18 semester hours including SpEd. 340, SpEd. 370, SpPa. 300 and 9 additional semester hours of approved course work in special education.

Completion of the minor program in general special education will not qualify the student for endorsement to teach in this area.

PROGRAM REQUIREMENTS

All students who major in the Department of Special Education are required to take the following courses:

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<th>Credit</th>
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<td>Eng. 101-102</td>
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<td>Hth. 270</td>
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In addition to the requirements above, students must elect the indicated number of semester hours in each of these General Studies areas:

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MENTAL RETARDATION PROGRAM

Students who major in mental retardation must take Art 310 or 314; SpEd. 340, 360, 370, 380, 406, 427, 428; SpPa. 200, SpPa. 300; and CoEd. 520. Students have the option of taking ElEd. 358 or SpEd. 381.

EMOTIONAL DISTURBANCE PROGRAM

Students majoring in emotional disturbance must take SpEd. 340, 345, 355, 370, 380, 381, 420; Read. 439; Psyc. 369, or 478, or 510; SpPa. 300; and six semester hours selected from Art 310 or 314; Soci. 427, CoEd. 520, SpEd. 406 or SpEd. 512. Students have the option of taking ElEd. 358 or SpEd. 381.

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. Students are urged to consult closely with their advisors on academic matters. At Madison College, all students who major in any Special Education program must also qualify for the Virginia Teaching Certificate.

**MAJOR IN SPECIAL EDUCATION—EMOTIONALLY DISTURBED**  
**(B.S. Degree)**

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**MAJOR IN SPECIAL EDUCATION—MENTAL RETARDATION**  
**(B.S. Degree)**

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288 Special Education
Description of Courses

Special Education


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 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.*

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.*

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 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*, 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 instructor.
DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

Professor Logue; Associate Professor O'Hare; Assistant Professors Bennett, Hinkle, Morris, and Runyan; Instructors Kaiser 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 Madison College 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, 214, 220, 300, 301, 302, 315, 316, 360, and 370.

MINOR PROGRAM

The minor in Speech Pathology requires a minimum of 19 semester hours of course work including SpPa. 200 (Introduction to Speech and
Language Disorders), SpPa. 214 (Speech and Language Disorders in the School Aged Child), SpPa. 300 (Children’s Language), and 9 additional semester hours of approved course work.

MAJOR IN SPEECH PATHOLOGY
(B.S. Degree)

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| 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.

SPPA. 207. *Clinical Phonetics*, 3 credits.

An introduction to phonological theories relating to speech and language therapy with emphasis on the clinical application of phonetic and phonemic analysis, experimental and acoustic phonetics, and proficiency in transcription of the International Phonetic Alphabet.

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 assessment and intervention.
techniques. Instruction in the organization and administration of public school speech therapy programs is included. **Prerequisites: SpPa. 200, 221.**

**SPPA. 220. Anatomy and Physiology of the Ear and Voice Mechanism, 3 credits.**
A study of the anatomy and physiology of the hearing and speech mechanisms. Attention is given to anomalies affecting speech production.

**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. 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.**

**SPPA. 370. Clinical Practicum in Speech Pathology, 3 credits.**
Clinical practice in the diagnosis and rehabilitation of children with communication handicaps. Programs are individually structured to provide the student with a variety of clinical experiences in the Speech and Hearing Center and other practicum sites. Individual supervision is maintained by staff consultants, with weekly group and individual conferences scheduled. **Prerequisite: SpPa. 200, and SpPa. 214.**

**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".

**SPPA. 501. Workshops in Speech Pathology (Summer), 1-3 credits.**
Designed to provide a detailed study of a topic of interest in speech pathology.

294 Speech Pathology & Audiology
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.

SPPA. 509. Diagnostic Audiometry—Measurement of Hearing, 3 credits.

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.

Hearing Disorders

HEDO. 505. Introduction to Hearing Disorders, 3 credits.

An overview of etiologies and diagnosis of hearing impairment, parent guidance, amplification systems, psycho acoustics, speech and language development, oralism, total communication and educational consideration. Prerequisite: SpPa. 301.

HEDO. 520. Sign Language and Total Communication, 2 credits.

Designed to teach students to use American Sign Language and total communication—Seeing Essential English. Prerequisite: Permission of Instructor.
MILITARY SCIENCE

The University of Virginia Army Reserve Officer Program (ROTC) conducts a program of military science instruction on the Madison College Campus. Madison College students who elect to participate in the ROTC program will receive academic credit applicable towards graduation for successful completion of ROTC courses. Students interested in the program should contact the Director of Military Science, LTC J. Walter Shugart by calling 433-6264, or 804-924-3381, collect.

Description of Courses

Military Science

MISC. 110. Military in Society, 2 credits.

Surveys several disciplines relating the military structure and function to contemporary society. There are films, lectures, and guest speakers designed to bring the military establishment into a realistic perspective.

MISC. 220. The Art of Military Leadership, 2 credits.

Psychological, physiological, and sociological factors which affect human behavior; individual, small group, and large group leadership problems are addressed as related to the military. The position of the United States in the contemporary world scene is discussed in light of its impact on leadership and management problems in military service. Prerequisite: Hist. 250 or approval of instructor.

MISC. 310. Theory and Techniques I, 2 credits.

A course conducted in lecture and practical exercise methods. It encompasses 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.

A course conducted by lecture and practical exercise methods. Covers 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.

A course conducted as a seminar. Analysis is made of selected leadership and management problems involved in individual, small group, and larger unit administration. The military justice system is addressed from a philosophical, historical, and practical base. This section of the course is augmented with guest speakers and panel discussions with faculty from the Judge Advocate General's School.

MISC. 420. Seminar on Military Team, 2 credits.

A course conducted as a seminar. 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 of the course on the practical problems of drug abuse and race relations.
Tuition and Financial Information
TUITION AND FEES

Listed below are the tuition and fees for undergraduate students which must be paid before registration can be completed at Madison College. The tuition and fees listed are applied toward the general maintenance and operating costs of the college, the costs of instruction, and other general college services including recreational and health service facilities. The fees shown include $14.00 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 College 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.

SEMMETER TUITION AND FEES

<table>
<thead>
<tr>
<th></th>
<th>Virginia Residents</th>
<th>Non Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Students</td>
<td>$366.00</td>
<td>$616.00</td>
</tr>
<tr>
<td>Part-Time Students (10-11 credit hours)</td>
<td>302.00</td>
<td>490.00</td>
</tr>
<tr>
<td>Part-Time Students (7-9 credit hours)</td>
<td>206.00</td>
<td>360.00</td>
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<tr>
<td>Part-Time Students (4-6 credit hours)</td>
<td>96.00</td>
<td>198.00</td>
</tr>
<tr>
<td>Part-Time Students (1-3 credit hours)</td>
<td>48.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

ROOM, BOARD, AND LAUNDRY

All students residing in College Housing will be charged $682.00 each semester for room, board, and laundry.

Only full-time students (those enrolled for 12 or more semester hours credits) are permitted to purchase a room, board, and laundry contract. The room, board, and laundry fee must be paid by all students who live in College controlled housing except those students living in the Showalter or Chandler Apartments who are exempted from the board fee. If these students desire to eat in Gibbons Hall, they must purchase a special boarding contract from the Food Services Department for $284.00 each semester.

SUMMARY OF CHARGES FOR FULL-TIME STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Per semester</th>
<th>Per Year</th>
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</thead>
<tbody>
<tr>
<td>Virginia Day Student</td>
<td>$366.00</td>
<td>$732.00</td>
</tr>
<tr>
<td>Virginia Boarding Student</td>
<td>1,048.00</td>
<td>2,096.00</td>
</tr>
<tr>
<td>Non-Virginia Day Student</td>
<td>616.00</td>
<td>1,232.00</td>
</tr>
<tr>
<td>Non-Virginia Boarding Student</td>
<td>1,298.00</td>
<td>2,596.00</td>
</tr>
</tbody>
</table>

Student Teaching: Student teachers will be considered to be full-time students subject to full-time fees while on practice teaching assignments.
**Student Nurses:** By special authorization of the Board of Visitors, student nurses in the diploma program of Rockingham Memorial Hospital will pay one-half the fees normally paid by other students.

**Auditor’s Fees:** A person who registers as an auditor will pay the same Tuition and Fees as one who registers for credit.

**Applied Music Fees:** The fees for full-time students will be as follows:

1. Instruction voice, piano, violin, organ, or other orchestral instrument:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Practice</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 lessons per week per semester</td>
<td>$50.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>1 lesson per week per semester</td>
<td>30.00</td>
<td>10.00</td>
</tr>
<tr>
<td>1 to 15 lessons per semester, each</td>
<td>2.00</td>
<td>.60</td>
</tr>
</tbody>
</table>

The number of lessons each student wishes to take will be arranged with instructors at the time of registration. A registration fee of $7.50 per semester is charged music students who register only for applied music, if they desire, and are qualified for college credits for such course or courses.

The semester fee for part-time students taking applied music will be $40.00 for one lesson a week and $80.00 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 College 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 College 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 $10.00 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 College 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, Board and Laundry 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 Madison College 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.

Commuter students who are eligible for health services will receive the same medical services as dormitory students, but will be charged $6.50 per day for room and board for any period of confinement.

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 College 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 College approved financial aid for any unpaid balance.

No student having unpaid fees and/or fines due for a previous session will be permitted to register until they are paid in full.

Debts Owed to the College: Any unpaid bills are subject to the following regulations enacted by the Board of Visitors of Madison College 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 College, 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 College.

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 Dean of Students.

Students who formally withdraw from the College before September 9th for the Fall session and January 20th for the Spring session will be refunded all tuition and fees except a withdrawal fee of $15.00. Board and laundry fees will be pro-rated from Dining Hall opening date. Room fees will not be refunded.

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 9th and October 20th and between January 20th and March 4th will be refunded at the rate of $8.00 per credit hour with a maximum refund of $120.00 plus pro-rata share of Board and Laundry fees. 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 pro-rata share of Board and Laundry fees. After October 20th and March 4th refunds will be for only a pro-rata share of board and laundry fees.

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 and laundry will be those stated in the College Calendar for the opening of the Dining and Residence Halls.

*Enforced Withdrawal:* Students whose connection with the College terminates on account 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 College urges students to make use of this service rather than to risk the loss of funds.
SCHOLARSHIPS, GRANTS, STUDENT EMPLOYMENT AND LOANS

The College 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 college 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 is degree seeking and in Good Standing. Good Standing is defined as eligible to enroll in course work at the College. This applies to all programs except those specifying certain grade point averages (General Undergraduate Scholarships require a 2.00 on a 4.00 scale).

Since the demand for scholarship, employment and loan assistance at Madison 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 College.

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 Madison College Application for Financial Assistance, the Parents’ Confidential Statement 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, Madison College 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 SHOULD BE MAILED TO THE ADDRESS AS INDICATED ON THE FORM IN ADVANCE OF THE APRIL FIRST DEADLINE.

The amount of financial assistance a student may receive depends upon his need—taking into account his financial resources, those of his parents, and the cost of attending the college of his choice.

Students who are awarded any type of financial assistance by Madison College 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 funds should become available by cancellation.

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 AVAILABLE TO STUDENTS.

ADDRESS: OFFICE OF FINANCIAL AID
Madison College
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 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. Students must have a cumulative average of 2.00 on a 4.00 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 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 made available by the Congress in 1965 and by Educational Amendments of 1972. Madison College 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 receive 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 new 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 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
COLLEGE 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 Student Financial Statement (SFS) 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 Student Financial Statement must be mailed to Princeton (for PCS) or Berkeley (for SFS) 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 encouraged to contact the Financial Aid Office.

**Agness S. Dinglydine Memorial Scholarship:** This scholarship was established in 1974 in memory of Mrs. Agness S. Dinglydine 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 selection of the recipient is made by the Director of Financial Aid. To apply for this scholarship, write the name of the scholarship under “OTHER: Specify Title or Name of Scholarship Program” found on page 2 of the buff colored application, mid-page.

**The Duke Memorial Scholarship:** This scholarship has been established in memory of the late Samuel Page Duke, who served so ably as President 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 semesters while a student at Madison College 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, Tennessee, as a memorial to his late wife, Lucy Copenhaver Gunter, a graduate 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, write the name of the scholarship under “OTHER: Specify Title or Name of Scholarship Program” found on page 2 of the buff colored application, mid-page.

**Minnie Christiansen-Margaret Miner Scholarship:** This is a scholarship which has been established in honor of Minnie Christiansen and Margaret Miner and is awarded annually to a student majoring in Home Economics. 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 established 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, write the name of the scholarship under “OTHER: Specify Title or Name of Scholarship Program” found on page 2 on the buff colored application, mid-page.

**The Edna T. Shaeffer and Glee Club Scholarship:** This fund has been established as a memorial to Miss Schaeffer, who served in the Madison...
Music Department and as Director of the College Glee Club for forty-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 Madison College, 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. To apply for this scholarship, write the name of the scholarship under “OTHER: Specify Title or Name of Scholarship Program” found on page 2 of the buff colored application, mid-page.

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, write the name of the scholarship under “OTHER: Specify Title or Name of Scholarship Program” found on page 2 of the buff colored application, mid-page.

ALUMNI SCHOLARS PROGRAM

The Alumni Association has made available academic scholarships that will be awarded solely on academic merit. Applications for the Alumni Scholarship will be mailed to those applicants for admission who seem best qualified by the Alumni Scholarship Committee.
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 Madison 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 CREDITED TO A STUDENT’S ACCOUNT.

**Food Service:** Madison College students are employed to assist in the serving of meals in the dining hall on campus. These meals are served cafeteria style requiring approximately two hundred students to operate the food facilities. Students are able to earn a portion of their college expenses from this employment. In addition to employment in the dining hall, students are also assigned to the Duke’s Grill located in the Warren Campus Center. Students who receive these work positions are selected on the basis of date of application, and personal qualifications. The position is awarded on a yearly basis and is renewable upon re-application and approval by the Food Service Manager and Director of Financial Aid. Applications for Food Service Employment are available in the Gibbons Dining Hall and Duke’s Grill located in the Warren Campus Center.

**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 Madison College. The student’s eligibility depends upon his need for employment to defray college expenses and his 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.

Madison College 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 PCS (Parents’ Confidential Statement) 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. Madison College 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 Madison College 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 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 College

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 institution. 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 College for this purpose will be faithfully used and greatly appreciated by the administration, the faculty, and the students. The President of the College will be pleased to confer or correspond with persons interested in establishing endowment or other scholarships for aiding worthy students.
OFFICERS OF ADMINISTRATION

PRESIDENT
Ronald E. Carrier, Ph.D.
G. Tyler Miller, B.S., LL.D.
Alice E. Liggett

President
President Emeritus
Secretary to the President

PRESIDENT

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Charles G. Caldwell, Ph.D.
Julius B. Roberson, Ed.D.

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Dean, School of Business
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Dean, Summer School;
Director of Student Orientation
and Academic Advising
Director of Continuing Education
Director of Admissions
Director of Financial Aid
Director of Records

O. Grant Rush, Ed.D.
Francis E. Turner, M.Ed.
Robert U. MacDonald, M.S.
Pauline C. Long, M.A. in Ed.

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Fred D. Hilton, Jr.

Vice President for Public Affairs
Assistant to the Vice President
for Public Affairs
Director, Alumni Services
Placement Officer
Placement Officer
Director, Public Information

Charles H. Scott, M.S. in Ed.
Edgar F. Wilkerson, M.R.E.
Thomas A. Nardi, M.Ed.
Richard Murray

Administrative Officers 313
### STUDENT AFFAIRS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>William O. Hall, Jr., Ed.D.</td>
<td>Vice President for Student Affairs</td>
</tr>
<tr>
<td>Fay J. Reubush, Ed.D.</td>
<td>Dean of Students</td>
</tr>
<tr>
<td>Michael M. Webb, M.S.</td>
<td>Director, Residence Halls</td>
</tr>
<tr>
<td>James F. Logan, Jr., M.A. in Ed.</td>
<td>Director, Student Activities;</td>
</tr>
<tr>
<td>Jon W. McIntire, Ph.D.</td>
<td>Director, Warren Campus Center</td>
</tr>
<tr>
<td>Walter F. Green, III, M.D.</td>
<td>Director, Counseling Center</td>
</tr>
<tr>
<td>Walter F. Green, III, M.D.</td>
<td>Director, Health Services</td>
</tr>
</tbody>
</table>

### BUSINESS AFFAIRS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolph H. Phillips</td>
<td>Vice President for Business Affairs</td>
</tr>
<tr>
<td>William F. Merck, II</td>
<td>Assistant to Vice President for Business Affairs</td>
</tr>
<tr>
<td>Donald E. Gardner</td>
<td>Comptroller</td>
</tr>
<tr>
<td>Lyman Seese</td>
<td>Treasurer</td>
</tr>
<tr>
<td>Eugene S. Wagner</td>
<td>Director, Physical Plant</td>
</tr>
<tr>
<td>Robert D. Griffin</td>
<td>Director, Food Services</td>
</tr>
<tr>
<td>Joseph W. Hancher</td>
<td>Manager, Bookstore</td>
</tr>
<tr>
<td>William W. Wilberger, Jr.</td>
<td>Director, Safety and Security</td>
</tr>
<tr>
<td>William G. Short</td>
<td>Purchasing Supervisor</td>
</tr>
</tbody>
</table>

### ADMINISTRATIVE AFFAIRS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>John P. Mundy, Ph.D.</td>
<td>Director for Administrative Affairs</td>
</tr>
<tr>
<td>H. Guthrie Allen, Jr.</td>
<td>Director, Personnel</td>
</tr>
<tr>
<td>Wyattte F. Callis</td>
<td>Director, Computer Services</td>
</tr>
<tr>
<td>William P. Jackameit, Ed.D.</td>
<td>Director, Institutional Research</td>
</tr>
</tbody>
</table>

### INTERCOLLEGIATE ATHLETICS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>O. Dean Ehlers, M.Ed.</td>
<td>Director of Athletics</td>
</tr>
<tr>
<td>L. Leotus Morrison, P.E.D.</td>
<td>Associate Director for Women’s Intercollegiate Athletics</td>
</tr>
<tr>
<td>Jack H. Arbogast, M.A.</td>
<td>Manager, Recreational Facilities</td>
</tr>
<tr>
<td>George Toliver, M.S. in Ed.</td>
<td>Manager, Recreational Activities</td>
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</tbody>
</table>

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Departments of: (Head’s Office)
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Hoffman 
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Virginia National Bank .......... Campus Center
NOTIFICATION OF NON-DISCRIMINATION ON THE BASIS OF SEX

Madison College does not discriminate on the basis of sex in its educational programs or activities which it operates. Madison College is required by Title IX of the Education Amendments (PL 91/320) of 1972 and Department of Health, Education and Welfare regulations to implement Title IX, Prohibiton of Sex Discrimination in Educational Programs and Activities Requiring Federal Financial Assistance, not to discriminate in such a manner. This requirement not to discriminate in education programs and activities extends to employment by the College and to all services thereby. Inquiries concerning the application of Title IX and the implementing regulations may be referred to Dr. Eva J. Anderson, Title IX Coordinator, Administration Hall 118, Madison College, Harrisonburg, Virginia 22801 (telephone 434-624) or to the Director of the Office of Civil Rights.
NOTIFICATION OF NON-DISCRIMINATION ON THE BASIS OF SEX

Madison College does not discriminate on the basis of sex in the educational programs or activities which it operates. Madison College 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 College and to admission thereto. Inquiries concerning the application of Title IX and the implementing regulations may be referred to Dr. Fay J. Reubush, Title IX Coordinator, Alumnae Hall 104, Madison College, Harrisonburg, Virginia 22801 (telephone 433-6218) or to the Director of the Office of Civil Rights.