Bridgewater College BC Digital Commons

Bridgewater College Catalogs
College Publications

1985

## Bridgewater College Catalog, Session 1985-86

Bridgewater College

Follow this and additional works at: https://digitalcommons.bridgewater.edu/college_catalogs
Non-Profit Organization
U.S. Postage
PAID
Bridgewater, Virginia
22812


## Catalog 1985-86

## Shaping Better

# BULLETIN OF BRIDGEWATER COLLEGE 

Bridgewater, Virginia 22812
703/828-2501

CATALOG ISSUE
ONE HUNDRED SIXTH SESSION, 1985-1986

Bridgewater College seeks to enroll qualified students regardless of sex, race, color, creed, handicap, or national or ethnic origin; and further, it does not discriminate on the basis of sex, race, color, creed, handicap, or national or ethnic origin in the administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other college administered programs and activities.

Bridgewater College welcomes visitors to its campus and inquiries about its educational program. Athletic, cultural, and social events are open to the public. Visitors should make appointments in advance with persons they wish to see and for guided tours of the campus if such tours are desired. For directions to Bridgewater, see page 116.

The mailing address is Bridgewater College, Bridgewater, Virginia 22812, and the telephone number is 703/828-2501. Letters to the College should be addressed, according to the nature of the inquiry, as follows:

1. President-bequests, development program, foundations, and general matters pertaining to the College
2. Provost-personnel matters for academic, student development, and secretarial staff; general matters pertaining to academic affairs and student development
3. Dean for Academic Affairs-academic requirements, evaluation of credits, curricula, courses of study, and handicaps
4. Business Manager-expenses, plans for payment of tuition, accident insurance, permits to keep automobiles, and other business matters
5. Director of Admissions-admission procedures, catalogs, viewbooks, and other information for prospective students
6. Director of Financial Aids-scholarships and financial aids
7. Registrar-student records and transcripts
8. Director of Summer School-all matters pertaining to the summer session
9. Dean for Student Development-general student affairs, handicaps, guidance and counseling services, housing
10. College Chaplain-student religious life and activities
11. Director of Campus Activities-general activities program and scheduling of banquets and meetings
12. Coordinator of Placement-credentials to support applications for employment
13. Assistant Director of Development—alumni activities, planned giving
14. Director of Church Relations-church-college relations
15. Director of Development-development program, bequests, foundations
16. Director of Public Information-news, publications


TABLE OF CONTENTS
Message from the President ..... 5
A Liberal Arts College ..... 6
Bridgewater, Past and Present ..... 8
Campus Setting and Facilities ..... 11
Student Life ..... 17
Getting Admitted and Meeting Costs ..... 27
Academic Excellence: Career Opportunities ..... 40
Courses of Instruction ..... 42
Academic and Degree Information ..... 91
Organization of the College ..... 101
Index ..... 116

The Bridgewater College Catalog is a multi-purpose bulletin. Because it serves as an official record of the College, it describes the courses of study, explains the rules and regulations, states the cost of attendance, contains registers of the administration and faculty, and suggests the spirit that pervades the campus. The catalog, therefore, serves as a reference to faculty and students and also as an introduction to prospective students and their families and friends. The Table of Contents gives the major divisions of the catalog; the Index at the back of the book helps locate specific information of interest.


To The Prospective Bridgewater Student:
Soon you will need to make one of the most important decisions to be made early in life-you must decide which college you want to attend.

Right now, you are entering one of the most important stages of your life. You have a deep sensitivity to what is going on about you. Your concern-for your own life, for others, for the world -runs extremely deep. The people you meet, the things you learn, the things you do-all have incredible influences on your later life.

Bridgewater College, as a small, coeducational, liberal arts college, offers you the kind of education which contributes to the development of the whole person. It has a strong faculty, an excellent array of courses, and a good physical plant. It has a tradition of sound scholarship and a Christian concern for all who study and work within its walls.

In reading this catalog, do not try to understand what Bridgewater is, but try to understand what it is in relation to what you want. Is the academic program the program that will stimulate and develop your intellect? Are the co-curricular activities those that will build your character and feed your inner needs? Are the religious emphases such that you will feel free to enter into dialogue about your deepest spiritual struggles? Are you looking for a college where there is warmth and friendliness as well as intellectual stimulation?

The experience you are about to begin is not an experience. It is your experience. We hope that you will consider making Bridgewater College your college.


Wayne F. Geisert President

A LIBERAL ARTS COLLEGE


As a college which seeks to be an academic community with a distinctively Christian atmosphere and with a wholesome balance of learning, service, and pleasure, Bridgewater endeavors to be a community in which each person is treated with respect, there is mutual concern and support, and each person can develop a sense of responsibility to others-both near and far. Bridgewater strives to promote breadth of intellectual experience as well as proficiency in specific subject fields. Broadly speaking, its primary academic objective is a comprehensive appreciation of the social sciences, the humanities, and the natural sciences.

Bridgewater endeavors to give its graduates a long head start as they choose and prepare for their careers. It is interested in their occupational competence and success and intends that they become both humane and effective professionals and practitioners. While it leaves the advanced training needed for a specific vocation to the university or the graduate school of business, law, medicine, engineering, or theology, Bridgewater concentrates on developing the total person. Thus, the student who goes directly from undergraduate work into homemaking, education, business or industry, or the one who goes on to technical or professional school should be able to participate in life with elasticity of mind and judgment, with imagination in dealing with unexpected emergencies, with disciplined taste and enjoyment, and with a sharpened ability to reason and communicate. This concentration on the total person-this emphasis on general education-differentiates the liberal arts college from technical and professional schools.

Concenirating on the total person is not a meaningless phrase. On the premise that a recognition of one's capabilities is the beginning of wisdom, Bridgewater offers a liberal education designed to help a student gain as complete a self-understanding as knowledge makes possible. A college of liberal learning devotes itself to helping its students find out how they think, what they feel, why they act, and who they are. Life at Bridgewater College can become a journey of exploration and discovery to the student who is committed unreservedly to the process of a liberal education.

In an age of rapid social and scientific change, it is more important than ever that a Christian liberal arts college invite its students to develop an appreciation of the complex bonds which relate persons to each other and to God. In the library, the classroom, the laboratory, the residence hall, or on the playing field, the student may discover his or her orientation for life. Believing that religion can be the integrating force in the lives of men and women, Bridgewater emphasizes the freedom and obligation of each individual to develop a personal faith and to find a place in the world.

## Educational Objectives

To live up to its educational commitment as a liberal arts college, Bridgewater provides resources and encouragement for the student:

- to acquire the ability to speak and write the English language with clarity and effectiveness;
- to understand how people, events, and ideas of the past have shaped the world in which we live;
- to become acquainted with at least one foreign culture;
- to understand the method and philosophy of science;
- to appreciate art, music, and literature with sensitivity and critical judgment;
- to understand the economic, political, and social structures of our society;
- to develop competence in critical and creative thinking which will facilitate exploration of new areas of knowledge;
- to seek knowledge in depth in a particular field;
- to focus on a career choice which integrates interests, abilities, values, and commitments; and
- to strive for good health, emotional maturity, and ethical and spiritual awareness.


## Summary

The education offered at Bridgewater is broad, deep, and liberating. It can emancipate one from narrow provincialism and from the distortion of subjective bias; it can free individual creativity and promote the art of the examined life; it can develop the realization that the gift of life demands service to humanity. It helps to conserve basic values while recognizing the need for change. It leads one, while acknowledging that truth is not fully known, to submit to the best and fullest truth that can be known.


## BRIDGE- <br> WATER, PAST AND PRESENT

Bridgewater was established in 1880 as Spring Creek Normal and Collegiate Institute by Daniel Christian Flory, an alumnus of the University of Virginia and a young progressive leader in the Church of the Brethren which was organized in Schwarzenau, Germany, in 1708 by Alexander Mack. Nine years later the school was named Bridgewater College and chartered by the Commonwealth of Virginia to grant undergraduate degrees. Bridgewater conferred its first bachelor of arts degree on June 1,1891 , théreby becoming the first of the colleges having historic associations with the Church of the Brethren to grant degrees.

The founding fathers wisely conceived of and organized Bridgewater as a residential college because they realized that students learn from one another as well as from the faculty. They felt that the conversation of all the students would be a series of lectures to each. They knew that students from widely different places, holding varied views and opinions, would have much to generalize, to adjust, to eliminate, and many inter-relationships to be refined in living together over a period of four years. They surmised the successive student bodies would develop a self-perpetuating tradition which would be educational in itself.

Two major influences, the University of Virginia and the Church of the Brethren, have shaped Bridgewater as an educational institution and created its personality. Its historic association with the Church of the Brethren, its modified Georgian architecture, its Honor Code, and its seal on which is inscribed truth, beauty, goodness, and harmony bear testimony to the strength of these two shaping influences.

Besides Daniel Christian Flory, its first two presidents, three of its four academic deans, and many of its strong teachers were educated at Virginia, Thomas Jefferson's university. Two of these men, John S. Flory, Sr., the second president of Bridgewater and one of its most influential teachers, and John W. Wayland, one of its distinguished teachers who is noted as the historian of the Shenandoah Valley, became charter members of the Raven Society, an honor society, organized there in 1904. While students at Virginia, all these men imbibed Jefferson's ideals of freedom of thought and expression, of rugged individualism, and of quality education and carried them to and established them at Bridgewater. Succeeding generations of faculty members and students have jealously guarded these ideals.

The Church of the Brethren, a pietistic and pacifistic Christian body with which Bridgewater has been associated since its founding, had as a part of its teachings a recognition of the supreme right of every person-regardless of race, sex, class, or clan-to the full development of his powers. As a result, Bridgewater became the first co-educational liberal arts college in Virginia and one of the few accredited colleges of its type in the South which was not greatly disturbed by the Supreme Court's desegregation decision of 1954. Bridgewater's heritage and institutional idealism has determined that its educational program should emphasize ethical and spiritual values. This emphasis on values can be discerned in the course offerings in religion, in the convocation programs, in an inclination to think well of people, in the stress placed on inner-directed character, and in a strong social consciousness.

Daleville College at Daleville, Virginia, was consolidated with Bridgewater in 1923. Blue Ridge College at New Windsor, Maryland, was affiliated with Bridgewater in 1930. In 1944 the Blue Ridge College plant was sold to the Church of the Brethren Service Committee. After all legal debts of Blue Ridge had been liquidated, its remaining assets of $\$ 44,861$ were transferred to Bridgewater as a scholarship fund for qualified Brethren youth from Maryland. The consolidation of Daleville with Bridgewater in 1923 and the sale of Blue Ridge with the transfer of its assets to Bridgewater in 1944 transformed Bridgewater from a small local college into a regional institution of higher learning with a territory extending from the northern boundary of Maryland to the southern tip of Florida and from the Atlantic Ocean to the Mississippi River. This enlargement of Bridgewater's territory and constituency was achieved through the educational statemanship of Paul H. Bowman, who was then president.

To further stimulate scholarship and to enrich the cultural life of the student body, Bridgewater became a participant in a cooperative program of undergraduate study abroad in 1962. The undergraduate study abroad program makes it possible for a select group of students to spend their junior years at Philipps-Universitat, Marburg/ Lahn, Germany; at the Institut d'Etudes Francaises Modernes of the University of Strasbourg, France; at the University of Barcelona, Barcelona, Spain; or at St. Mary's-St. Paul's and Gloucestershire Colleges in Cheltenham, England.

Bridgewater has a student body of approximately 850 men and women from 20 states and several foreign countries who represent many races and creeds. (Bridgewater College is authorized under Federal Law to enroll non-immigrant alien students.) The College offers the Bachelor of Arts Degree in 27 major fields and the Bachelor of Science Degree in 17 major fields. Electing to keep its enrollment small, Bridgewater maintains a faculty-student ratio of $1: 15$, thus insuring that the College knows its students one by one.

Bridgewater insists that its teachers be not only proficient and inspiring disseminators of knowledge, but that they also be creators of it. Faculty members do research, read papers before learned societies, and publish books and articles. This emphasis on the search for knowledge has encouraged student-faculty research and has developed a challenging honors program.

These generalizations are supported by academic facts. Each year a significant number of the graduating class enter graduate and professional schools. Publications issued by The National Academy of Sciences (A Century of Doctorates, 1978) and The National Center for Educational Statistics (Education Directory, Colleges and Universities 1977-78) revealed that in terms of the number of graduates who later earned Doctor of Philosophy or equivalent degrees, Bridgewater ranked at the 75 th percentile among the 1,956 four-year colleges and universities in the country for the period between 1920 and 1974. Since this percentile ranking was on the basis of numbers without regard to size of institution, it is obvious that in proportion to its size Bridgewater ranks very high among undergraduate institutions. The Bridgewater characteristic of being an outstanding undergraduate source of persons who later earn advanced degrees is not a new one but rather a long-standing one. For example, according to a study reported in the Journal of Southern Research, January-February issue, 1954, Bridgewater College ranked fifth among Southern colleges and universities on the basis of the number of their graduates who later earned advanced degrees in the sciences.


Over the years, Bridgewater graduates have regularly received fellowships and assistantships for graduate and professional study from outstanding universities of the country. Bridgewater scholars have received Fulbright, Woodrow Wilson, National Science Foundation, Root Tilden, and Rockefeller Theological Fellowships.

Bridgewater is ever conscious of the fact that it was founded as a normal and collegiate institute and then developed into a college of arts and sciences. Each year about 15 per cent of its graduates prepare to enter the teaching profession. Bridgewater ranks near the top among the independent colleges in Virginia in the number of teachers it trains. Its contribution to higher education has been greater than that to elementary and secondary education. Bridgewater alumni are on the staffs of colleges and universities throughout the land. For example, the head of the Department of Drama at Connecticut, Mary Reynolds Babcock Professor of Botany at Wake Forest, a plant pathologist at the University of Florida, and the former Dean of the Law School at the University of Missouri, are all Bridgewater alumni.

Acceptance by its peers in the field of education is the desire of every school. Bridgewater was accredited in 1925 by the Commission on Colleges of The Southern Association of Colleges and Schools as a Level II, General post-secondary institution, and has been a member in good standing ever since. It is also accredited by the State Board of Education of Virginia and offers a State-Approved Program of teacher education. Bridgewater is a member of the American Council on Education, the Association of Virginia Colleges, the Council of Independent Colleges, and the National Association of Independent Colleges and Universities.

Bridgewater has had an honorable history, spanning more than a century. It has been true to the Jeffersonian and Brethren ideals of the founders by encouraging freedom of thought, by pioneering in co-education and integration, by growing and developing to meet the changing needs of the passing years, by insisting on high scholastic standards, and by educating good and useful citizens.

Bridgewater College is located in the Shenandoah Valley, a scenic and historic region in Virginia. The Allegheny Mountains to the west and the Blue Ridge chain to the east are both visible from the campus. Old Stone and Mossy Creek Presbyterian Churches; the Cross Keys and Piedmont Civil War battlefields; and Natural Chimneys, an interesting geological phenomenon, are just a few miles off the campus. Many houses in the town of Bridgewater are 135 years old or older.

Situated in a beautiful and historic setting, the Bridgewater campus is comprised of 165 acres. The educational activities are focused on the primary campus of 40 acres on which are located Bridgewater's complex of buildings of different periods and styles of architecture. The beauty and charm of the campus complement Bridgewater's friendly atmosphere.

The rooms in all the residence halls are provided with single beds, mattresses, dressers, tables, bookshelves, window shades, and electric bulbs. Students provide linens, bedding, pillows, curtains, table lamps, rugs, and other furnishings desirable to make the rooms more attractive and comfortable.

Blue Ridge Hall, a residence hall for 125 women and a director of residence, was erected in 1949. The name of the hall honors Blue Ridge College of New Windsor, Maryland, which was discontinued in 1944.

Daleville Hall, another residence hall for women, houses 105 students, together with a director of residence. It was built in 1962-63. The name of the hall honors Daleville College of Daleville, Virginia, a Church of the Brethren college, which was consolidated with Bridgewater in 1923.

Dillon Hall, erected in 1965-66, houses 168 women and a director of residence. The name of the hall honors J. B. Dillon who was a trustee of Bridgewater for 26 years; his brother, W. D. Dillon, a benefactor of the College; and their father, John Henry Dillon, who was a leader in the Church of the Brethren.

Heritage Hall, erected in 1963-64, accommodates 170 men and contains an apartment for the director of residence, reception rooms, and recreation rooms. The hall is named in honor of Allen B. Bicknell, Newton D. Cool, Frederick D. Dove, John S. Flory, Mattie V. Glick, J. Maurice Henry, Minor C. Miller, A. Ray Showalter, C. E. Shull, and Marshall R. Wolfe, who gave the best years of their life to the College.

Wakeman Hall, erected in 1980, accommodates 102 men and a resident director. The building is named for Benjamin O. and Crystal Driver Wakeman, longtime friends and supporters of the College. Designed for the utmost comfort and utility, Wakeman Hall replaced Wardo as a residence for men.

Wright Hall, erected in 1958-59, accommodates 164 men and contains apartments for two residence hall directors, reception rooms, and recreation rooms. The name of the hall honors the brothers Frank J. and Charles C. Wright. Dr. Frank J. Wright, a distinguished geologist, was the first academic dean appointed at Bridgewater. Dr. Charles C. Wright served the College thirty-nine years as professor of economics and one year as acting president. From 1924 through 1946, he was both professor of economics and academic dean. In 1924, his brother Frank became professor of geology at Dennison University.

## Residence Halls

Rebecca Hall, erected in 1928-29 as a women's residence and dining hall, and completely renovated in 1969, now houses offices and studios of the art department, other faculty offices, the home economics departments, and a lecture roomauditorium for 200 persons. The building is named in honor of Mrs. Rebecca Driver Cline, wife of Benjamin Cline of North River, Virginia, whose contribution helped pay for its construction.

Yount Hall, constructed in 1905, was extensively remodeled in 1977 to provide offices for the Admissions staff, the Director of Financial Aids, the Coordinator of Career Planning and Placement, and for faculty offices and classrooms. Its name commemorates the valued services of Walter B. Yount, Bridgewater's first president, and also the services of his gifted mother, Mrs. Margaret C. Yount.

Cole Hall, was erected in the summer and fall of 1929 as the auditorium section of a future administration building. The auditorium seats about 650 people and is equipped with a modern stage, dressing rooms, a stage lighting system, motion picture and sound equipment, an artist grand piano, and a three-manual Moeller organ with 51 ranks of pipes which was installed in 1974. The name of the building perpetuates the memory of Dr. Charles Knox Cole. It is a gift of his daughter, Mrs. Virginia Garber Cole Strickler.

Alexander Mack Memorial Library, erected in 1962-63, is designed to house 115,000 volumes and to seat 275 readers. Special features included in it are a Church of the Brethren Room, a Bridgewater College Room, faculty studies, a listening room, the Archives Room, a seminar room, a conference room, a micro-form (card, film, and fische) room, and typing facilities. Air conditioned and functional in every respect, the Alexander Mack Memorial Library is constructed of brick, concrete, pressed stone, and steel. Its name and a memorial plaque built into the structure honor Alexander Mack, founder of the Church of the Brethren.

Flory Hall, named in 1984, in honor of D.C. Flory, the College's founder, and John S. Flory, long-time President and Professor, is the complex made up of the former Founders Hall (erected in 1903), Wardo Hall (erected in 1910), and the new link connecting these two historic buildings. Wardo Hall served as a men's residence for most of its history. Founders Hall has housed principal administrative offices and classrooms. Flory Hall will continue to house principal administrative offices, classrooms, and faculty offices.

Bowman Hall, erected in 1953, houses the natural and social science divisions. The name Bowman Hall honors Samuel M. Bowman, Paul H. Bowman, and Warren D. Bowman. Samuel M. Bowman gave the College an estate to promote instruction in biology, agriculture, and home economics; Paul H. Bowman served the College as president for twenty-seven years; and Warren D. Bowman served as president for fifteen years.

Memorial Hall, formerly known as Stanley Hall, was built in 1890. In 1927 it was renovated and re-dedicated as Memorial Hall. The building was modernized in 1953 and 1971. The first floor was made into a band room, a listening room, music classrooms, and practice rooms containing pianos and an electronic piano laboratory; the second floor has been converted into studios, a music stock room, a lounge, and a recital hall which is equipped with pianos and a nine rank tracker Moeller organ.

Nininger Hall, formerly known as Alumni Gymnasium, was named for R. Douglas Nininger, long-time chairman of the Board of Trustees, his wife and other members of his family. The building was erected in 1957-58 and was extensively remodeled in 1979-80. In addition to the usual athletic facilities, the building contains three new


Educational and Recreational Facilities (Cont.)

classrooms and a swimming pool that boasts a movable floor to accommodate the handicapped.

Jopson Field, named in honor of Dr. H. G. M. Jopson, emeritus member of the faculty and coach of track and cross country teams, is a spacious and attractive field lying along the southern boundary of the campus and bordering North River for several hundred yards. The original field was purchased and developed with contributions from the Classes of 1923, 1924, 1925, and 1926 and many other alumni and friends. Extensive renovation of the field was completed in the summer of 1971 when drainage and irrigation systems were installed, an all-weather track was constructed, and the football field and baseball diamond were relocated. The entire facility also includes practice and playing fields for soccer, field hockey, lacrosse, and softball.

The College Street Church of the Brethren is located on the campus. The first structure on the present location was erected in 1914. A new sanctuary and additional facilities for Christian education were added in 1953. The old sanctuary was converted into a chapel and extensive remodeling was completed in 1965. The faculty, students, and guests are cordially welcome to study and to worship.

The Kline Campus Center, completed in the summer of 1969, is one of the finest student services centers of its kind. It is named in honor of the Wilmer Kline family who gave generously in support of the cost of the facility and Elder John Kline, Church of the Brethren martyr during the Civil War. The main floor has a cafeteria with a student dining capacity of 550 and enclosed side dining areas for small student groups. The room will accommodate 900 under banquet conditions. Also on this level are a reception desk for campus visitors, the main lounge, an art gallery, and the college president's dining room.

## THE BRIDGEWATER CAMPUS

 KEY TO BUILDINGS(Date in parentheses indicates year of construction or acquisition)

1. Yount Hall (1905): Admissions Office, Financial Aids Office, Career Planning and Placement Office, Foreign Language Department
2. Memorial Hall (1890): Music Department
3. Flory Hall (named 1984), comprised of the former Founders Hall (1903), Wardo Hall (1910), and the connecting link (1984): Office of the President, Office of the Provost, Office of the Dean for Academic Affairs, Registrar's Office, Business Office, Development Office, Departments of Education, English, History, Philosophy and Religion, and Sociology
4. Old Gymnasium (1908): maintenance building
5. College Heating Plant (1921)
6. Manges House (1910)
7. Wright House (1900)
8. Missionary House (1900)
9. Bridgewater Church of the Brethren (1914)
10. Alexander Mack Memorial Library (1963)
11. Wright Hall (1959): men's residence
12. Heritage Hall (1964): men's residence
13. Bowman Hall (1953): Departments of Biology, Chemistry, Economics and Business, Mathematics and Computer Science, Physics, Psychology; C. E. Shull Computing Center
14. Blue Ridge Hall (1949): women's residence
15. Daleville Hall (1966): women's residence
16. Wakeman Hall (1980): men's residence
17. Dillon Hall (1968): women's residence
18. Moomaw Hall (1969): Home Economics Department
19. Rebecca Hall (1929): Art Department, Student Development Offices, Chaplain's Office, Counseling Office, campus radio station
20. Kline Campus Center (1969): visitor's reception, student services, dining hall,

bookstore, post office, student senate and publications offices
21. Cole Hall (1929): auditorium, Reuel B. Pritchett Museum, chapel
22. Boitnott House (1900)
23. Strickler Apartments
24. Bicknell House (1900): infirmary
25. President's Home (1949)
26. Nininger Hall (1980)
27. Jopson Field
28. College farm house (1900): women's residence


The lower level houses a large bookstore, snack shop, billiards room, campus post office, and faculty-alumni room. Lockers are provided for day students. Student government and publications offices are on the top floor. The center, completely airconditioned, is connected to Cole Hall auditorium and to the lecture room-auditorium facilities of Rebecca Hall.

Moomaw Hall, serving the home economics department, was built and put into use in 1969 , honoring Leland C. and Nina Kinzie Moomaw of Roanoke, Virginia, who gave generously toward the project. The women of the southeastern region of the Church of the Brethren have also contributed substantial funds toward the building, and several church district and local women's groups gave continuous support. An area of the facility honors Miss S. Ruth Howe, former chairman of the department.

The C. E. Shull Computing Center honors Dr. C. E. Shull, professor emeritus of mathematics and physics at Bridgewater. Bridgewater students for three generations admired, honored, and respected Professor Shull both as a teacher and as a person. He devoted more than forty years to teaching thousands of students and to administering the Mathematics and Physics Department. Professor Shull was granted the honorary degree of Doctor of Science in June 1961 by his alma mater.

The computing center is equipped with a PRIME 750 computing system which was installed in 1981. The computer is a high-speed interactive system capable of simultaneously handling educational and administrative jobs. The computing system includes tape and disc information storage, two line printers, twelve cathode ray terminals and a serial printer dedicated to student use, three terminals for faculty use, and several terminals and printers in the administrative offices. A number of microcomputers are also in use on campus serving various departmental needs.

The Reuel B. Pritchett Museum was established by Elder Reuel B. Pritchett of White Pine, Tennessee, who gave his large collection of old books, old Bibles, and articles of antiquity to the College in 1954. The collection consists of 175 rare books, including a copy of a Bible published in Venice in 1482, and seven Bibles printed in Philadelphia in the eighteenth century by Christopher Sauer. Over 10,000 other items are included in the collection. The collection is housed in Cole Hall. All items in it have been catalogued and are available for inspection and study.

Among other physical facilities of the College are a number of faculty residences, several small apartment houses, the president's home, the central heating plant, the old gymnasium used for a maintenance and storage facility, and the College farm.


A liberal arts college is ideally "a place where small groups of students live together in mutual good will, in friendly helpfulness, and in earnest study." In the words of Woodrow Wilson, "it is a mode of association . . . a free community of scholars and pupils." The words "free community" suggest common interests, living in the same place under the same laws, and participation in making and carrying out of the laws governing its members. Bridgewater has not realized completely this ideal of a college community, but it has achieved it in part.

## The Student Senate

Both the faculty and the student body participate in aspects of the operation of the College. The faculty is a central force in determining policy on academic matters and has significant influence on general college matters. The Student Senate, through appointing student members to faculty committees as well as through its own structure, involves the students in many aspects of the operation of the College. Through this body the individual student has the opportunity to fulfill the role of a voting citizen in a community of 850 citizens, to help mold student opinion and present it to the administration, to cooperate with the faculty in interpreting College traditions, to direct the Honor System, and to serve as a citizen relating to a general governing body for many student co-curricular activities. The Senate is a representative body of students with faculty advisors. Its constitution and the detailed regulations under which it operates are set forth in the Eagle, the handbook for students.

## The Honor System

Personal honor, integrity, and faith in and respect for the word of another are the bases of the Bridgewater Honor System. The Honor Code prohibits lying, cheating, and stealing. Violation of the Code by a student is a serious offense which can result in dismissal from Bridgewater. The Honor System is controlled and administered by the Honor Council, an important adjunct to the Student Senate.

Each Bridgewater student is encouraged to develop positive and wholesome patterns of study, work, worship, recreation, and the use of leisure time. It is anticipated that increasingly each should be able to manage his or her own discipline and that consideration of other persons' rights, regard for the common respectabilities and courtesies of adult behavior, and a desire to deepen and enrich one's own life will become central in his or her pattern of conduct.

Attendance at college is always a privilege, and not a right. Since students vary greatly in the levels of their maturity, it is desirable to indicate the expectations of the college relative to student citizenship.

The College encourages its students to refrain from possessing or using alcoholic beverages. Students who feel that alcohol must be a part of their college lives should not attend Bridgewater. It is important that the student understand that possession or use of alcoholic beverages on campus, or returning to campus in an intoxicated condition, will subject the student to dismissal from college or other disciplinary action.

Possession or use of marijuana and other illegal drugs by Bridgewater College students is forbidden and will subject the student to dismissal or other disciplinary action. Furthermore, violators will not be protected from legal action.

The College prohibits gambling, hazing in any form, and the possession or handling of firearms and fireworks in the residence halls and on the campus. The use of

## Government

## Campus <br> Regulations

Campus Regulations (Cont.)

## Resident

Hall Regulations
profanity is discouraged, and smoking is limited to the out-of-doors, the residence halls, and the Snack Shop.

Permission to keep a vehicle at college must be obtained at the Business Office during the time of official registration in the fall. At all other times, permission may be obtained at the Office for Student Development. One must register a vehicle within twenty-four hours of bringing it to the College. Temporary permits are also available in the event that a student needs to substitute another vehicle for the one registered. Failure to cooperate with the above principles may subject the student to dismissal or other disciplinary action.

If, at any time, the conduct of any student becomes detrimental to the work of other students and to the best interest of the College, the administration reserves the right to request the student to withdraw from the college community. If and when a student is asked to withdraw, there is no refund of fees.

Students are held responsible for the proper care of their rooms and furniture. Room inspections are made occasionally, and damages are charged to the occupants of the room. Damage to other college property by students is likewise chargeable to them.

Bridgewater students take responsibility for their own laundry. Coin-operated washers and dryers are available in the residence halls, and local laundries and cleaners are located within walking distance of the campus. At the option of the student, linen service is also available on a rental basis through the Virginia Linen Service.

During the Thanksgiving, Christmas, and Spring recesses the dining room closes and students are required to vacate their rooms. The first meal to be served after each vacation is the evening meal prior to the day of registration or the resumption of classes.

The College rates are moderate and do not include guest privileges. The guests of students may be accommodated in College quarters for a limited time by special arrangement for a modest fee. The prevailing guest rates for meals will be charged at the dining room. All visitors at the College are expected to pay for meals taken in the dining room unless they are issued complimentary tickets by an official of the College.

Bridgewater College maintains separate residence halls for men and women, and each full-time student is required to live at the College or have permission from the Off-Campus Housing Committee to be a non-resident student. Letters of request for a non-resident status should be addressed to the committee c/o Dean for Student Development, prior to registration. Students who do not reside with parents or spouse are required to live at the College. Consideration for non-resident status is given to those who are age 24 before September of the academic year in question, or those who student teach during their final term at some distance from the campus. Requests to live off-campus during the Summer Term is also considered for those students who have employment in the area throughout the summer.

The conditions and provisions set forth in this catalog should not be considered as a contract between the College and the student. The College reserves the right to make changes in conditions and provisions when such changes seem necessary and wise. In practice such changes are rarely retroactive.

Automobile travel and athletic activities involve an element of hazard which students and parents should recognize. The College is always cooperative and helpful in cases of accidents and injuries but is not liable for any expenses resulting from them. Accident insurance is compulsory and is covered in the inclusive fee.

Bridgewater discourages frequent absences from its campus by students, whether for the purpose of going home or for visiting elsewhere, because absences break the continuity of academic work and harm the students' academic record. Parents are asked to cooperate fully in keeping at a minimum student absenteeism from the campus.

Sales representatives are not permitted to make solicitations in the dormitories except upon permission of the Administration. Students acting as sales representatives must secure a permit from the Business Office.

The College operates a snack shop on the campus to provide sandwiches and refreshments to students and faculty. No other group of students is permitted to sell refreshments on the campus without a permit from the Business Office of the College.

Bridgewater College promotes appreciation of the fine arts by bringing to the campus touring theatrical companies, stage personalities, professional musicians, and noted lecturers. The Committee on Cultural Activities plans the Lyceum Series of cultural programs and presents a series of artistic foreign and domestic films.

The Campus Center Program Council plans and executes a recreational, social, and cultural program. It sponsors formal and informal dances, receptions, teas, informal parties, and special events. It also plans and executes the movie program on campus, Christmas week activities, the May Day pageant, and cooperates with the Director of Alumni Affairs in planning the Homecoming Day celebration.

## Convocations

Convocations at Bridgewater College serve an integrative function in the general liberal arts educational program. This purpose reflects the desire of the College (a) to emphasize an interdisciplinary approach to issues in all academic fields, and (b) to explicate the interrelationship between culture and Christianity evident in Western civilization. Diverse media such as lectures, films, art, drama, and music are used to achieve those educational goals.

Two convocations are held each week during the ten-week terms. While specific attendance policies vary with the classification of the student, each student attends at least seven convocations per term. For a student who meets the convocation attendance requirement, at the end of each term a grade of $S$ is entered on the student's permanent record; for a student who does not, a grade of $U$ is entered.

The Convocation Committee, established to implement the program, is composed of representatives from the three major liberal arts divisions: arts and humanities, social sciences, and the natural sciences. In addition, the Committee includes the Dean for Academic Affairs, the Dean for Student Development, and student members appointed by the Student Senate.

## Athletics

A strong believer in the old Roman adage of a sound mind in a strong body, Bridgewater encourages both men and women students to participate in sports by fostering a challenging intramural program and also a varied intercollegiate one. The College believes that actually competing in sports is far more rewarding than being a spectator at sports events.

The intramural program includes badminton, basketball, flag football, racquet-

Resident
Hall Regulations (Cont.)

Co-Curricular Activities

Co-Curricular Activities (Cont.)
ball, soccer, softball, tennis, track and field, and volleyball for both men and women. In intercollegiate sports, Bridgewater fields teams in baseball, basketball, football, golf, tennis, track, and cross country for men. The women participate in basketball, cross country, field hockey, tennis, lacrosse, and volleyball.

Bridgewater College holds membership in the National Collegiate Athletic Association and abides by all regulations set forth by this body. Bridgewater is also a member of the Old Dominion Athletic Conference.

## Dramatic Activities

The Pinion Players, assisted by other students on the campus interested in drama, presents two full-length plays and a drama workshop each year in order to develop dramatic talent, to keep the College community acquainted with examples of contemporary and classical drama, to suggest to students the vocational and avocational opportunities in the field of drama, and to provide laboratory opportunities for students enrolled in acting and play production classes.

## Debate

Bridgewater College offers its students an opportunity to participate in intercollegiate debate. Each year College teams participate in a number of invitational tournaments, and over the years Bridgewater debaters have won top honors. First year debaters may compete in the novice division while the varsity division is open to all experienced debaters. The Debate Club is the sponsoring organization.

## Music

Bridgewater recognizes the importance of music, not only as a part of the curriculum of a liberal arts college, but also as a vital part of campus life. Students are encouraged to participate in the several musical organizations of the college.

From its founding, Bridgewater has been known as a "singing college." There are three choral groups. The Oratorio Choir is the large ensemble that rehearses during the Fall Term and performs a major work during the advent season. The Concert Choir, a group of $45-50$ students, performs on campus and tours extensively in the Spring Term. The Chorale is a group of 16 singers that performs on campus and tours at various times during the year to schools and churches.

Instrumental ensembles at Bridgewater include the Concert Band, the Stage Band, the Pep Band, and small woodwind and brass ensembles. These bands and ensembles perform on campus both formal and informal concerts and tour at various times during the year.

Rich expressional activities, including frequent student recitals, parallel the courses in theory and applied music. Private instruction in piano, organ, voice, and instruments is available for students.

## Publications

Students write, edit, and publish a newspaper, The Talon, which highlights campus news and affords students opportunities to air publicly differences of opinion on controversial issues, College policies, and student government action. Students also
publish a yearbook, the Ripples, which is usually distributed in May of each year. Both the newspaper and the yearbook have won honors in state and national competition.

The Eagle, a handbook for all students, contains the constitution and bylaws under which the Student Senate operates, a register of the faculty, a register of student leaders, the school calendar, a list of student organizations, the words of the College song, and a summary of Bridgewater ideals and traditions. The College publishes annually the Catalog, the President's Report, a Bridgewater Magazine, and three issues of the Bridgewater Newsletter for parents of students and friends of the College.

Students interested in creative writing, journalism, or photography are encouraged to exercise and develop their talents. In addition to developing these talents through course assignments and participation in the above publications, the College publishes the Philomathean each year. Contributions to be included in the Philomathean are selected by a faculty editorial board.

## Other Organizations

The Young Democrat's Club, Young Republican's Club, French Club, Ski and Outing Club, Circle "K," Women's Athletic Association, Fellowship of Christian Athletes, Mu Epsilon Mu, Photo Club, Physics Club, Pre-medical Society, Student Chapter 168 of the Music Educators Conference, Guild Student Group of the American Guild of Organists, the Bridgewater College Chapter of the Student National Education Association, and the campus radio station WGMB are among other student organizations at Bridgewater.

## Freshman Orientation

To help incoming freshmen adjust quickly and happily to college life, four days are devoted to their orientation at the beginning of the fall term. The Council on Student Affairs and the Deans for Student Development direct the program. Upperclassmen serve as student-to-student counselors for small groups of freshmen. Directed group discussions are held regarding study habits and note taking, Bridgewater ideals and traditions, the Honor System and how it functions, co-curricular participation, and social opportunities. Through planned social gatherings, freshmen are given chances to meet their classmates and to become acquainted with their instructors and faculty advisers.

Objective tests and examinations are given to freshmen during this orientation period to gather valuable data to be used later for placement, counseling, and guidance purposes.

## Counseling and Guidance

The Counseling Program at Bridgewater College helps students to know themselves in their social milieu; to meet their personal, academic, and social problems intelligently; and to adjust themselves creatively to their fellows. In addition to the Dean for Academic Affairs, the Deans for Student Development, Associate Dean for Counseling Services and Director of Campus Programs, the Chaplain, the College Nurse, and the residence hall directors, the entire teaching staff at Bridgewater College is involved in guidance and counseling.

Students are assigned to faculty advisers in the department in which they intend to major. Because the primary responsibility of a faculty adviser is to advise concerning registration, course requirements, and academic regulations, personal counseling is

Co-Curricular
Activities
(Cont.)

Student
Services
usually referred to one of the appropriate staff members named above. In this connection, the Associate Dean for Counseling Services and the Deans for Student Development have particular responsibility to help students understand themselves and to assist them in their adjustments to college life and work.

## Career Planning and Placement

The Career Planning and Placement Office works in cooperation with faculty and the Alumni Office for optimum help to students. It provides personal interviews, testing, small group sessions, and printed resources to assist the student in planning toward a satisfying and productive career. The student is guided in (1) understanding of self, especially those factors of interests, abilities, and personal qualities that contribute to wise career choices, (2) knowledge of various occupations and levels of work, (3) awareness of long-range career options, and (4) developing interview and resume skills.

The Director of Career Planning and Placement, faculty advisors, and the Dean for Academic Affairs assist academically able students in securing admission to graduate and professional schools and in securing graduate fellowships and assistantships.

For students seeking employment immediately following graduation, the College operates a placement service. This office lists job opportunities, arranges for oncampus interviews between seniors seeking positions and representatives of business, industry, and school systems, and supports student job applications with credentials.

## Health Services

Every effort is made by the College staff to promote the health and physical welfare of students through proper sanitation and cleanliness, safeguarding food supplies, and teaching physical education. The Council on Student Affairs cooperates with the College Nurse and Physicians to provide the best conditions possible for the physical welfare of students. A physical examination is required of all new students prior to registration. Vaccinations and inoculations against contagious diseases are required.

The infirmary is under the general supervision of the College Nurse, whose services are available to all students. In case of common illnesses, boarding students receive the services of a college physician while he is on duty in the infirmary. Where treatments at other times or prescriptions are necessary, the student will be expected to pay the doctur or the druggist directly. Day students may receive treatment in the infirmary.

The College views religious activities as natural and essential parts of student life. Students are encouraged to deepen their understanding of the Christian faith while they are on campus and to give expression to their Christian beliefs through campus religious activities. Opportunities are provided to make Christian commitment more meaningful through group worship experiences and service projects.

The College Chaplain is involved with students in experimental ministries and worship, small group ministries and counseling, and the holding of special interest
retreats. He is a member of the College's counseling staff and available to staff, faculty, and students for personal and religious counseling.

The Council on Religious Activities, composed of faculty and student membership and working with the Student Committee on Religious Activities, provides support for the many initiatives through which students and faculty grow religiously together. Thus, special interest religious groups are encouraged; regular chapel worship services and religious convocations are held: and retreats. discussion groups. religious emphasis lectures, movies or religious themes, service activities, Bible study and prayer groups, etc. are planned. There is an active organization, Students Interested in Relating to the Church, through which students may consider the various dimensions of full-time church vocations.

The Bridgewater Church of the Brethren is located adjacent to the college campus and provides a church home for many students. Baptist, Methodist, and Presbyterian churches are located in the town of Bridgewater, and students take an active part in their programs. A Roman Catholic Mass is celebrated weekly in the campus chapel. Students also participate in the worship and work of the churches of Harrisonburg where Baptist, Brethren, Episcopal, Lutheran, Methodist, Presbyterian, and Roman Catholic churches are to be found. A Jewish Temple is also located there.

A number of special interest student groups are active including the Brethren Student Fellowship (on campus), the Baptist Student Union (Center in Harrisonburg), the Wesley Fellowship, and the Lutheran Student Association as well as in conjunction with the Brethren, Methodist, Presbyterian and Baptist churches of Bridgewater. The Fellowship of Christian Athletes for both men and women and the Inter-Varsity Fellowship are active on campus. Students are encouraged to maintain their denominational affiliations as well as to participate in the ecumenical religious activities that give significance to the Christian faith.

The Study Abroad Program currently provides for a year of undergraduate study at the Philipps-Universitat, Marburg/Lahn, West Germany; University of Strasbourg, Strasbourg, France; or the University of Barcelona, Barcelona, Spain; or one or two semesters of study at St. Mary's and St. Paul's College, Cheltenham, England. The program is conducted by Brethren Colleges Abroad, a cooperative program sponsored by Bridgewater College and five other colleges affiliated with the Church of the Brethren. A resident director is maintained at each European location to coordinate the program with the host university officials and to assist students as need arises.

Students can receive a full year of college credit at one of the three European universities, including round trip transportation, for approximately the same cost as a college year in the United States. Only limited scholarship assistance is available to students participating in this program. The program provides an opportunity for a true mastery of the German, the French, or the Spanish language; a first-hand knowledge of a foreign culture; and an opportunity to become an active participant in the challenging task of creating a climate of mutual respect and understanding among the nations of the West.

Participants in Brethren Colleges Abroad programs in Europe fly from New York in late August. During September and October, the students attend special language training institutes where the emphasis is on conversational skills, vocabulary necessary for successful attendance at Strasbourg, Marburg, or Barcelona, and orientation to the culture and civilization of contemporary France, Germany, or Spain. Six units of credit may be earned during the orientation period.

Religious
Life and
Services
(Cont.)

Study
Abroad
Program

Study

The winter semester at the universities runs from approximately November 1 to March 1. During the winter semester, the students select their courses from a wide variety of offerings in modern language, history, literature, economics, political science, religion, philosophy, and the natural sciences.

Marburg students are allowed almost six weeks for special and independent study or travel between the winter and summer semesters. The summer semester begins at Marburg about the Middle of April and closes in mid-July. There is no such semester break at Barcelona or at Strasbourg; however, vacation periods are allowed at Christmas and Easter. The second semester at Strasbourg closes early in June; at Barcelona, about June 15. All participants in BCA are expected to take the full academic year of work.

Candidates for the program must have had at least two years or the equivalent of the German, the French, or the Spanish language at the college level. Other qualifications include high general academic ability, emotional stability, intellectual initiative, the ability to participate constructively in the life of a small group, and the personal attributes which will permit one to serve as a responsible and scholarly representative of America abroad. Applications for admission to the program must be filed with the Dean for Academic Affairs before January 15 of the sophomore year.

The program at St. Mary's and St. Paul's College in Cheltenham, England, is designed primarily for students who plan to teach, and it is particularly appropriate for students of elementary education. While a student may participate in this program in either or both the fall or spring semesters, the fall is typically chosen by Bridgewater students.

## Scholarship Honors

Dean's List-Bridgewater holds before its students the ideal of achieving to the limits of their powers, especially in the academic area. From time to time, appropriate recognition is given to students whose performance in the pursuit of knowledge and truth is outstanding. At the end of each term, the Dean for Academic Affairs announces the Dean's List which consists of the names of all students who have a quality point average of 3.20 or above on the program of courses attempted.

Graduation Honors-One may graduate from Bridgewater summa cum laude, magna cum laude, or cum laude. To graduate summa cum laude, a student must achieve a quality point average of 3.80 , complete an honors project with a grade of " $B$ " or better, and score in the upper quarter on the written and oral comprehensive examinations. To graduate magna cum laude, a student must achieve a quality point average of 3.50 , complete an honors project with a grade of " B " or better, and score in the upper half on the written and oral comprehensive examinations. To graduate cum laude, a student must achieve a quality point average of 3.20 and perform satisfactorily on the written and oral comprehensive examinations. Honors oral examinations are administered prior to May 1 by the student's major professor with the assistance of two other faculty members appointed by the major professor and the Dean for Academic Affairs. Usually, one member of the orals committee is from outside the student's major department.

Transfer students may receive honors. To graduate with honor recognition, a transfer student must not only conform to the above standards but must also achieve an equivalent standard on his or her total academic record, including work taken prior to transfer.

The Lambda Society-The primary purpose of the Lambda Society is to encourage scholarly effort and achievement and to honor and reward students, faculty
members, and alumni who have achieved unusual distinction in the pursuit of knowledge. Seniors are eligible to be elected to full membership when they have successfully passed the requirements for graduation with honors. Upperclass students who have achieved honor grades may be elected to Associate Membership.

Alpha Chi-The Virginia Gamma Chapter of Alpha Chi, a national collegiate honor society, is organized to promote truth and character, to stimulate and recognize scholarly effort, and to encourage critical and creative thinking which will enable one to explore new areas of knowledge. Junior and senior members of Lambda Society who have completed at least thirty units at Bridgewater, possess a cumulative quality point average of 3.20 or above, and rank in the top ten per cent of their class are eligible for election to membership in this society.

## Other Honors

Bridgewater elects annually from fifteen to twenty seniors to membership in Who's Who Among Students in American Universities and Colleges on the basis of scholarship, leadership in co-curricular and academic activities, citizenship and service to the College, and promise of future usefulness to society.

There is a chapter of Delta Sigma Rho-Tau Kappa Alpha, a national honorary forensic society, on campus. Membership is restricted to students who have distinguished themselves in intercollegiate debate and have a high level of academic achievement.

Bridgewater has a chapter of Pi Delta Epsilon, a national honorary collegiate journalistic fraternity, on the campus. This organization seeks to develop student interest in journalism, to improve student publications, and to promote high ethical standards in collegiate journalism. Only students who have done outstanding work on The Talon, the student newspaper; on the Ripples, the student yearbook; or with WGMB, the campus radio station, are eligible for membership in Pi Delta Epsilon.

Alpha Psi Omega, a national honor society devoted to developing dramatic talent and the art of acting, to cultivating disciplined taste in drama, and to fostering the cultural values of dramatic art, has a chapter on the campus. Membership in this honor society is restricted to those who have distinguished themselves in acting, production, or directing.

In the spring of each year an athletic awards banquet is held. Varsity letters are awarded in all intercollegiate sports, and outstanding achievement in athletics is recognized with appropriate awards.

## Prizes Awarded

Alumni Scholarships-A scholarship, valued at $\$ 650$, is awarded annually to a student who is a rising senior, who ranks high academically, is a good citizen, and possesses general merit. A second scholarship, valued at $\$ 550$, is awarded to a student who is a rising junior according to the same criteria.

The Planters Bank of Bridgewater Scholarship-This scholarship, valued at \$250, is awarded annually by the Planters Bank of Bridgewater, Virginia, to a worthy student from Augusta or Rockingham County in Virginia. The College names the recipient of the scholarship.

Honors
and
Awards
(Cont.)

Summer Session

Bridgewater operates an eight-week summer session to enable students who wish to do so to complete their degree requirements in three years instead of four, to enable students who have fallen behind in their work to regularize their programs, and to enable teachers who need credits in academic and professional subjects for the renewal of their certificates to secure them.

An integral part of the total college program, the summer session offers standard courses, most of which are taught in the regular session; it is staffed by men and women chosen from the regular faculty. A student may enroll for a maximum of ten units of credit in the summer session. To enroll for more than ten units, a student must apply for permission from the Dean for Academic Affairs.


Alumni Association

The Alumni Association, organized prior to 1900, seeks to strengthen the bond of loyalty between the alumni and their alma mater, fosters an esprit de corps of good fellowship among alumni, organizes and maintains strong local chapters, and helps promote the growth and development of the College.

The Alumni Association is governed by its elected officers and a board of directors composed of 29 members. The Assistant Director of Development, as the chief executive of the association, directs all alumni relations and activities and helps organize and maintain chapters throughout the nation. At present there are 25 active alumni chapters and fellowship groups.

All graduates and students who have completed at least twelve semester hours of credit at Bridgewater College are eligible for membership in the Alumni Association. Those who have graduated or earned transferable credit at Bridgewater or from the former Blue Ridge or Daleville Colleges, prior to 1966, are members of the association. Faculty, staff, trustees, and those awarded honorary degrees are honorary members of the association. The association charges no dues but all members are urged to make annual contributions to the alumni fund. These yearly contributions keep the alumni in good standing and their memberships active.

Requirements. Bridgewater College seeks to enroll qualified students regardless of sex, race, color, creed, handicap, or national or ethnic origin; and further, it does not discriminate on the basis of sex, race, color, creed, handicap, or national or ethnic origin in the administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other college administered programs and activities. Admission is granted to those who present evidence of ability to succeed in the type of program provided. While success in a liberal arts college may depend upon several qualities, applicants for admission to Bridgewater are epxected to show the following types of ability and achievement:

1. Graduation from an accredited senior high school or secondary school. The program of courses completed in the high school should include the following units of credit; four in English; two in one foreign language, preferably in French, German, or Spanish; two in college preparatory mathematics, preferably algebra; two in social studies and history; two in science; and four in suitable electives. While the electives may be in vocational or non-academic subjects, it is recommended that they be in academic subjects such as English, science, mathematics, and social studies. In case the applicant wishes to become an engineer or scientist, two of the four electives should be in mathematics.
2. Average or better than average scholarship on the secondary school program completed. The grades or marks made on the high school or secondary school program and scores made on achievement tests covering the secondary school subjects should be high enough to give reasonable assurance of ability to do college work. Rank in the upper half of the graduating class is normally required. If an applicant ranks lower than the upper half, strong compensative qualities need to be shown in order to gain admission.
3. A satisfactory score on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board. While applicants are not required to take the Achievement Test (ACH), they are urged to do so. The Achievement Tests in English Composition and in Intermediate or Advanced Mathematics are recommended especially. A bulletin of information concerning these tests may be obtained from high school officials or by writing directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. The dates for both the Scholastic Aptitude Test and the Achievement Tests are as follows:

November 3, 1984
December 1, 1984
January 26, 1985
4. Good health and character. Success in a church-related liberal arts college depends not only upon the type and quality of secondary school program completed but also upon health and good character. Good character includes such qualities as clean living, high aspirations, and industriousness. Applicants are expected to present evidence of them.
Procedure. Application for admission may be made upon the completion of the junior year in high school, and it should be made not later than June 1 of the year one wishes to enroll. Applications received after that time will be considered only if accommodations are still available. Those who wish to enter at the beginning of the Winter Term, the Interterm, or the Spring Term must file an application for admission at least thirty days in advance of the desired date of enrollment.

GETTING
ADMITTED
AND
MEETING COSTS

Admission

In order to obtain full and complete information concerning the achievements of applicants and their abilities to do college work, Bridgewater College will make use of the following methods:

1. The application blank. The application blank has been designed to provide information needed by the Admissions Committee. This blank may be obtained from the Office of Admissions. After it has been completely filled out, it should be returned to this office. This is the first step, and a very important one, to be taken by all who wish admission to Bridgewater College.
2. The high school or secondary school transcript. Upon receipt of the application blank properly filled out, the College asks the applicant's high school to furnish an official transcript of his academic record. Transfer students are required to submit official transcripts of their records at other institutions.
3. Written recommendations. Upon receipt of the application blank properly filled out, the College asks the applicant's guidance officer and his minister to provide a character rating or a letter of character recommendation.
4. Personal interview. Soon after the application blank has been sent in, any applicant who has not talked with an official representative of the College should arrange to come to the campus for a personal interview. This interview is conducted by a member of the admissions staff. Appointment for an interview may be made by telephoning or writing to the Director of Admissions.
5. Health record. Each applicant must present a written health report on a form supplied by the College. The form, properly executed, must be returned to the College before official registration can begin.

Each application is acknowledged by a letter from the Director of Admissions. As soon as the various data included in the application have been received and evaluated, the applicant is sent a note of acceptance or rejection. Inquiries from applicants are welcomed. Questions are answered and requested information is provided promptly.

Readmission. Students who are absent from the College for any ten-week term or longer; students who have withdrawn from the College for any reason; and students who have been suspended for a term must apply for re-admission to the Director of Admissions. If the applicant for re-admission withdrew for health reasons, a letter of recommendation and evaluation may be required from a professional clinician.

Transfer Credit. A student who has attended another accredited institution and is in good standing there may apply for admission to advanced standing not later than the beginning of the senior year. One who has attended an accredited two-year college may transfer as many as 68 units of credit in courses comparable to those offered at Bridgewater College. Transfer students are expected to present official transcripts of their records at former institutions as well as any other information deemed necessary by the Admissions Committee. Normally, transfer credit is not allowed on courses bearing a grade of less than C. However, by special permission, depending on the circumstances, limited credit may be allowed on courses bearing a grade of D. For an explanation of quality point average, see page 91 .

Advanced Placement. Credit and advanced placement is awarded to students on the basis of results on the Advanced Placement Tests of the College Entrance Examination Board, but subject in every instance to the approval of the department concerned and of the Council on Education. Advanced Placement Tests are available

in English Composition and Literature, American History, European History, French, German, Spanish, Art, Music, Computer Science, Mathematics, Biology, Chemistry, and Physics. Students interested in taking one or more of these tests for the purpose of obtaining credit and advanced placement at Bridgewater should confer with the secondary school principal during their junior year or earlier and with the College upon application for admission.

The College considers the results of the College Level Examination Program as a means of determining advanced placement for students who have not followed the traditional pattern of preparation.

Bridgewater College strives to keep expenses at the lowest figure possible consistent with superior quality in education.

Student expenses are calculated on the basis of one inclusive fee covering all costs which are generally assessable to all students. The inclusive fee covers the cost of tuition, registration, student activity fees, library fee, medical fee, accident insurance, physical education fee, and all laboratory fees, excepting breakage deposits, plus room and board charges for residential students.

The accident insurance which is required of all students covers all medical expense incurred as a result of accidental bodily injury up to $\$ 1,000$ for each and every separate injury. This insurance is written for a twelve-month period and will be paid as stipulated regardless of where the student may be injured. All injuries must be reported to the Business Office before any claim can be satisfied. Sickness insurance is not covered in the inclusive fee, but it may be purchased at the option of the student for a reasonable cost ( $\$ 37.00$ for the 1985-86 session).

## Expenses

Expenses for the Session

Expenses for the 1985-86 Session

|  | Residential Students | Non-Residentia Students |
| :---: | :---: | :---: |
| Inclusive Fee | \$8,250.00 | \$5,370.00 |
| Reservation Deposit | 200.00* | 100.00* |
| Payments by students attending the entire academic year are due according to the following schedule. Students attending part of the year are referred to the statement on the Interterm. |  |  |
| September 1, 1985 | 2,750.00 | 1,790.00 |
| November 11, 1985 | 2,750.00 | 1,790.00 |
| February 3, 1986 | 2,750.00 | 1,790.00 |

*The reservation deposit applies to the final payment for the Spring Term. For new students, it is due 30 days after admission and is non-refundable after May 1. Students admitted after May 1 must make a deposit within 10 days after admission. For returning students, the reservation deposit is due on April 1 and is non-refundable. Returning students who fail to make the deposit on time pay a penalty of $\$ 20$ and may not complete a preliminary registration, select classes, or reserve a room until the deposit and the penalty have been paid.

The College neither gives final examinations, grants a degree, nor issues grade report forms or transcripts of credits unless satisfactory arrangements have been made with the Business Office for payment of all fees.

## The Interterm

Basic costs of the Interterm are borne within the charges assessed for the three main terms for students in regular ongoing attendance. Obviously, no refund is made to a student who chooses not to attend the Interterm. There are, of course, additional charges to the student enrolled in interterm experiences involving travel, off-campus housing, etc.

A student who attends two ten-week terms plus the Interterm pays one-third of the Basic Interterm Fee (see page 31) in addition to the two payments at the beginning of the ten-week terms. A student who attends one ten-week term plus the Interterm pays two-thirds of the Basic Interterm Fee in addition to the payment at the beginning of the ten-week term.

## Part-Time Students

A part-time student (one who is permitted to register for five units or less in a ten-week term) who resides off campus, pays $\$ 155.00$ per unit of credit plus a Registration Fee of $\$ 20.00$ per term. A part-time student who resides on campus pays $\$ 155.00$ per unit of credit plus the same student fees paid by all other resident students. Payment must be made at the time of official registration. A part-time student is not eligible to receive scholarship aid.

## Special Fees

Overload-per unit of credit ..... \$ 60.00
Audit Fee-per unit of credit ..... 40.00
Art Studio Fee ..... 20.00
Supervised Teaching Fee ..... 75.00
Graduation Fee ..... 25.00
Application Fee (paid only once; not refundable) ..... 20.00
Late Registration Fee ..... 10.00
Returned Check Fee ..... 10.00
Transcript (first copy free) ..... 2.00
Room with connecting bath per term (women only) ..... 25.00
Room in Wakeman Hall per term ..... 50.00
Private room fee per term (if available) ..... 160.00
Dormitory Key Replacement ..... 5.00
Car Registration-Resident student ..... 10.00
-Non-resident student ..... 5.00
Identification Card Replacement ..... 5.00
Placement Credentials (first 5 copies free) ..... 2.00
Basic Interterm Fee for students enrolled part of the year:Resident student825.00
Non-resident student ..... 540.00
Deposits
Dormitory and Room Key Deposit ..... $\$ 100.00$
(Damage to dormitory and to dormitory furniture is charged to thisdeposit. The dormitory and room key deposit is made at the time thestudent first enrolls, and it is retained by the College until the studenteither graduates or withdraws. Returning students cover assessmentsthat have been made against the deposit by bringing it back to the levelof $\$ 100.00$ at the time of each fall registration. Failure on the part ofthe student to turn in his or her identification card, room key, orcheck-out slip at the end of each academic year will cause the deposit tobe forfeited. Any unused portion of the deposit will be refunded atgraduation or upon withdrawal from the College when identifcationcard, room key, and check-out slip signed by the Director of Residenceis presented to the Business Office at the conclusion of the student'sattendance.)

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Laboratory Breakage Deposits:

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources

Earth and Its Physical Resources .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00 .....  .....  .....  .....  .....  .....  .....  .....  ..... \$ 5.00

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry

Fundamentals of Chemistry .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  .....  ..... 5.00

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry

General Chemistry .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  .....  .....  ..... 5.00

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry

Organic Chemistry .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00 .....  .....  .....  .....  .....  ..... 10.00

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis

Quantitative Analysis .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00 .....  .....  .....  .....  ..... 5.00

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry

Advanced Analytical Chemistry .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00 .....  .....  .....  ..... 5.00

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry

Physical Chemistry .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00 .....  .....  ..... 5.00

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry

Biochemistry .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00 .....  ..... 5.00
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis
Organic Qualitative Analysis ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00 ..... 5.00
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)
(Refunds will be made at the close of the session on unused balances.)

Expenses
for the
Session

## Expenses <br> (Cont.)

## Private Instruction

Private instruction fees are in addition to tuition and overload charges.


#### Abstract

Piano, Voice, and Wind Instruments: Per term


One lesson per week . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 75.00
Two lessons (same instrument) per week . . . . . . . . . . . . . . . . . . . . . . 140.00
Pipe Organ, one lesson per week ........................................... . 95.00

## Variable Expenses

Each student pays for his own laundry, personal expenses, and books. Books cost approximately $\$ 250.00$ per year and may be purchased on a cash basis from the College Bookstore.

## Withdrawal from College

To withdraw from Bridgewater College at any time during the academic year, a student must first confer with the Dean for Academic Affairs who will furnish the student with a form requiring the signatures of appropriate college personnel. A student who fails to withdraw properly will forfeit his or her dormitory and room key deposit and will receive failing grades in all currently enrolled courses.

## Refunds

The College must contract for its faculty and other educational services a year or more in advance. Thus, no refund of tuition and fees is allowed except in the rare instance in which a student withdraws for health reasons upon the recommendation of the College Physician.

Advance deposits are not refunded in any instance. Hence, in the event of approved withdrawal for health reasons, the refund of the remainder of tuition and fees is provided according to the following schedule:

During the first two weeks following registration . . . . . . . . . . . . . . . . . 80\%
During the third and fourth weeks following registration . . . . . . . . . . $50 \%$
During the fifth and sixth weeks following registration . . . . . . . . . . . . . 20\%
After the sixth week following registration . . . . . . . . . . . . . . . . . . No refund
Refunds for board in the above case of a student withdrawn upon the recommendation of the physician will be made on a pro rata basis as of the end of the week within which the student is withdrawn.

## Methods of Payment

The inclusive fee for each term and fees for all part-time students are due according to the schedule on page 30. All financial aids administered by the College other than Supplemental Educational Opportunity Grants, National Direct Student Loans, and Church-College Matching Grants are applied to the students' accounts at the rate of 30 per cent in each of the Fall and Winter terms and 40 per cent in the Spring term. Supplemental Educational Opportunity Grants, Basic Educational Opportunity Grants, National Direct Student Loans, and Church-College Matching Grants as well as funds awarded under the Virginia Tuition Loan Assistance Grant/Loan Program and the College Scholarship Assistance Program are applied to the students' accounts at the rate of one-third each term. Work aid is applied each term as earned.

For those who prefer to pay the Inclusive Fee in equal monthly installments rather than the payment schedule as shown on page 30, you may choose among several plans offered by various organizations. These organizations offer a Prepayment Plan which involves no charge for interest on an Extended Repayment Plan with interest charged at competitive rates. All plans offer life insurance for an insurable parent which covers the remaining portion of the student's contract in the event of the parent's death. Information concerning each of these plans will be mailed to all students during the spring. Information may be obtained in advance by writing to:

Academic Management Services, Inc.<br>1110 Central Avenue<br>Pawtucket, Rhode Island 02861<br>Richard C. Knight Insurance Agency, Inc.<br>Insured Tuition Payment Plan<br>6 Saint James Avenue<br>Boston, Massachusetts 02116<br>The Tuition Plan, Inc.<br>Concord, New Hampshire 03301

Recognizing that college costs are of legitimate concern to many students, Bridgewater College utilizes some of its own resources and administers resources provided by other agencies to provide a substantial and varied program of financial aid. While academic promise and potentiality for success, both on campus and beyond graduation, are requisites for all types of aid, the principal requisite is financial need.

Recipients of scholarships and financial aids are informed at the earliest possible date after the receipt of necessary applications and required information. However, no student is awarded financial aid until after admission to the College. Aid recipients are required to maintain records of satisfactory academic achievement and satisfactory personal conduct.

## Application Procedures

Both returning and new student applicants for any form of financial aid need to submit the Financial Aid Form (FAF) to the College Scholarship Service of the College Entrance Examination Board prior to March 15. Freshman applicants obtain their Financial Aid Forms from their high school guidance offices; upperclassmen, from the College Office of Financial Aids. The College Scholarship Service does not award aid; it assists the College and other agencies toward a better understanding of the student's financial need. This form constitutes an application for aid to the College and to the Pell Grant Program. A nominal fee is charged by the College Scholarship Service for this service.

All students seeking aid must be enrolled or accepted for enrollment on a full-time basis. Prospective students should submit the FAF no earlier than January 1, 1985 and no later than March 15. Since financial aid cannot be granted until a student has been officially admitted to the College, it is advantageous to submit your application for admission prior to the submission of your FAF in order to expedite an early response from the Office of Financial Aids. Financial aid packages are released on a rolling basis to freshmen no earlier than March 1 and not later than March 15.

## Financial

Assistance

Financial Assistance (Cont.)

## Scholarships and Grants

From the scholarship fund, the following scholarships and grants are provided:

1. President's Scholarships-There are two levels of President's Scholarships. At the top level, three scholarships are awarded to outstanding entering students. The recipients, known as President's Merit Scholars, receive stipends of $\$ 16,000$ for the four years of college usable at the rate of $\$ 4,000$ a year. A President's Merit Scholar is required to maintain a 3.50 cumulative quality point average in order to continue eligibility for this scholarship. To be considered and to be eligible to compete for this scholarship, applicants must rank in the top ten percent of their high school classes and have superior SAT scores.

At the second level, typically, ten to fifteen scholarships are awarded each year to highly selected entering students. The recipients, known as President's Scholars, receive stipends of $\$ 10,000$ for the four years of college usable at the rate of $\$ 2,500$ a year. A President's Scholar is required to maintain a 3.20 cumulative quality point average in order to continue eligibility for this scholarship. To be considered and to be eligible to compete for this scholarship, applicants must rank in the top ten percent of their high school classes and have excellent SAT scores.

Scholarship winners are chosen each year from among applicants for admission who have completed all application procedures and have participated in the College's scholarship competition. Recipients who have demonstrated financial need may receive additional aid by filing a Financial Aid Form with the College Scholarship Service.
2. Honor Scholarships-Typically, twenty-five to thirty scholarships are awarded each year. The recipients, known as Honor Scholars, receive stipends of $\$ 4,000$ for the four years of college usable at the rate of $\$ 1,000$ a year. An Honor Scholar is required to maintain a 3.00 cumulative quality point average in order to continue eligibility for this scholarship. To be considered and to be eligible to compete for this scholarship, applicants must rank in the top ten percent of their high school classes and have competitive SAT scores. Recipients with demonstrated financial need may receive additional aid by filing a Financial Aid Form with the College Scholarship Service. A transfer student from another accredited college who possesses a quality point average of 3.20 or higher and appropriate high school credentials may also compete for this scholarship.
3. General Scholarships-A number of scholarships, with minimum values of $\$ 100$ and maximum values depending on the needs and the academic achievements of the applicants, are awarded each year to qualfied applicants. Preference is normally given to students with the following characteristics:
a. Academic achievement in the secondary school program which would insure academic success in college.
b. Satisfactory scores on the SAT of the College Entrance Examination Board.
c. A degree objective at Bridgewater College.
4. Regional Grant-Entering freshmen, transfer students and current Bridgewater upperclassmen who are graduates of high schools in Rockingham, Augusta, Page, and Shenandoah Counties, or the cities of Harrisonburg,

Staunton and Waynesboro, are eligible for participation. Freshmen and transfer students must be admitted to the College to be eligible. It is renewable as long as the student's cumulative quality point average each spring is at least 2.00 and the student has not been placed on disciplinary probation during that year. Bridgewater upperclassmen must also meet the renewal qualifications. For 1985-86, all students classified as freshmen, sophomores, and juniors will receive an annual stipend of $\$ 750$ which is renewable at that amount. Seniors will receive a $\$ 500$ stipend. By the 1986-87 academic session, all students will receive annual awards of $\$ 750$.
5. Maryland Scholarships-Income from the Blue Ridge College Fund provides a limited amount of money each year which is available for students from Maryland provided they are members of the Church of the Brethren and need financial assistance. The amount of each scholarship varies, depending on need. Applications from freshmen will be considered first. In case funds are available after all freshmen applicants have been considered, upperclassmen will be eligible provided evidence of need is presented.
6. Foreign Student Scholarships-The College offers five scholarships each year to students from foreign countries who enroll at Bridgewater College. These scholarships cover the amount of tuition for a regular session. The scholarship is renewable each year provided the applicant's achievement is satisfactory.
7. Church-College Matching Grants-The College cooperates with the Church of the Brethren in a matching grant assistance program designed to aid Church of the Brethren young people in attending Bridgewater College. The College will match up to $\$ 300$ per year ( $\$ 100$ per term) in support designated for a particular student by a local church of the Church of the Brethren. The student can thus realize up to $\$ 600$ per year in combined support from the College and his local church at the initiative of his local church. The appropriate form for the matching grants must be placed in the hands of the College Financial Aids Officer by local church officials by August 1 in advance of the Fall Term; October 1, the Winter Term; January 1, the Spring Term. It is understood by all concerned that the College may use its own funds or any funds administered by it in matching the grant from the Church; and further, that if the student has already been approved for a college grant or scholarship, that grant or scholarship shall be considered as relating to the College's matching responsibility. In addition, it is understood that the College retains the right to determine the student's academic eligibility for admission and/ or continuation in college quite apart from eligibility for the matching grant.
8. Ministerial Scholarships-The College offers all student ministers of junior or senior classification who are licensed or ordained, or otherwise committed to definite ministerial service, scholarships valued at $\$ 200$ for each year. Fulltime pastors who enroll as part-time students are granted fifty per cent discounts on the basic tuition on as many as three units of course work each term.
9. Scholarships for Children of Ministers and Missionaries-Children of active pastors and missionaries or of others giving full time to church work are eligible upon request for scholarship assistance of $\$ 250$ per year.

Financial Assistance (Cont.)

## Financial

 Assistance (Cont.)10. Nursing Education Scholarship-An annual scholarship of $\$ 1,000$, provided by the Brethren Health Education Foundation, will be awarded to a student studying in nursing education or the other healing arts. This scholarship is based on need and merit.
11. Augusta County Scholarship-This scholarship has a value of $\$ 200$ per year. It is derived from an endowed fund provided in 1954 by the Augusta County Alumni Chapter and will be awarded to a qualified applicant from Augusta County, Waynesboro, or Staunton. This recipient must present evidence of good character and of financial need.
12. 50-50 Plan -Persons who are 50 years of age and older may enroll for credit with a scholarship equal to 50 percent of the tuition.
13. Special Audit Program-Persons who are 65 years of age and older or 60 years of age and retired may audit courses on a "space available" basis for a special audit fee of $\$ 25.00$ which includes the registration fee.

## Specific Named Scholarships

The money for scholarships comes from gifts by interested alumni and friends, from churches, and from the income of endowed funds. The list of named scholarship funds follows:
J. M. and Minnie Alexander Fund

Anonymous Donor-Organ Scholarship Madeleine Long Arthur Memorial Fund
Anna Mary Bopst Shaw and Erma Bopst Bonsack Scholarship Dr. and Mrs. Edward C. Bixler Memorial Scholarship Fund Bridgewater College Alumni Association Scholarship Fund
William L. Brown Scholarship Fund-Biological Sciences
Harry F. Byrd, Jr. Scholarship Fund
Christian Experience Summer Scholarship Fund (O. P. Williams Fund, S. A. Harley Memorial, E. D. Flory Memorial)

Clericus Fund
David and Effie Cline Scholarship Fund
Margie Ann Conner Scholarship Fund-Choral and Keyboard Music
Warren, Robert and Laura Craun Scholarship Fund
W. Burton Dillon Scholarship Fund
J. B. and Betty D. Dillon Educational Fund

John L. Driver Memorial Scholarship Fund
W. E. Driver Scholarship Fund
J. Alfred and Ada E. Duncan Scholarship Fund

Jesse Ball DuPont Scholarship Fund-Christian Service
Evelyn V. Edmonson Memorial Scholarship Fund
Eller Memorial Scholarship Fund
Jessie Mae Conner Eller Memorial Fund
Mary and Charles Fifer Memorial Fund
F. Bruce Forward, Jr. Scholarship Fund

Harold and Isabelle Garber Scholarship Fund
Simon D. and Ruth L. Glick Scholarship Fund
John T., Effie Evers, and Paul Emerson Glick Memorial Scholarship Fund
J. W. Hines Scholarship Fund

Warren W. Hobbie Scholarship Fund
J. A. and Kittie Danner Hoover Scholarship Fund

Paul E. Hoover Scholarship Fund<br>Aaron M. Horst Scholarship Fund<br>Nelson T. Huffman Scholarship Fund<br>Donald Lester Kline Memorial Fund<br>John M. Kline, Jr. Family Memorial Music Scholarship Fund<br>I. S. and Effie V. Long, Madeleine Long Arthur Scholarship Fund Edward Lukens Scholarship Fund<br>Russel E. and Mary Zigler Mason Scholarship Fund<br>Lee and Ida Hinegardner May Scholarship Fund<br>A. D. and Emma Grace Miller Educational Fund<br>George W. Miller Family Scholarship Fund<br>John D. and Bertha Cline Miller Scholarship Fund<br>Minna Mintzer Memorial Scholarship Fund<br>Kathryn Leigh Moore Memorial Fund<br>Richard D. Obenshain Memorial Fund-Public Service<br>Pixie Perdue Scholarship Fund-Nursing Education<br>Charles E. and Anna M. Resser Memorial Scholarship Fund<br>David L. Rogers Scholarship Fund<br>Jesse Edward Rolston Fund<br>Earnie J. and Viola Rowe Scholarship Fund<br>Helen Early Ruby Memorial Scholarship Fund<br>Scherrfig (Sherfey) Family, J. Arthur and Dora Clark Allison Scholarship Fund<br>Anna Bowman Seese Memorial Scholarship Fund<br>Anna Snader Spoerlein Memorial Fund<br>Mary Hoover Smith Scholarship Fund<br>Ruth Weybright Stauffer Organ Scholarship Fund<br>Virginia Garber Cole Strickler Memorial Fund<br>Orland "Jack" Wages Bridgewater Rotary Scholarship Fund<br>Charles W. Wampler, Sr. Scholarship Fund<br>Fred J. and Ernest M. Wampler Family Scholarship Fund

## Work Opportunities

The College employs quite a number of students to perform services about the buildings and campus. The positions available involve such services as library, laboratory, and office assistants; waitresses; janitors; and campus workers. The positions are assigned to applicants who are qualified to render the required services. However, need is considered and upperclassmen are given priority. The applicant for a position files a written application with the Director of Financial Aids.

## Commonwealth of Virginia Financial Aids

1. Virginia Tuition Assistance Grant-The amount of a Virginia Tuition Assistance Grant, dependent upon a level of funding by the Virginia General Assembly, is independent of the financial status of the student and his or her family. During the 1984-85 academic session the value of this grant is $\$ 975$. To be eligible, the student must be a legal resident or domiciliary of Virginia. The deadline to apply is June 1, and application forms are available from the Financial Aids Office.
2. College Scholarship Assistance Program-To apply for this grant, a Financial Aid Form (FAF) must be submitted by March 15 to the College

Financial
Assistance (Cont.)

Financial Assistance (Cont.)

Scholarship Service. Bridgewater College will prepare a list of nominees from the applicant pool for approval by the State Council of Higher Education. State regulations require the minimum award amount to be $\$ 400$ with the maximum at $\$ 1,000$.

## Federal Govermment Financial Aids

Following is a brief description of the financial aid programs made available by the Federal Government for students who are citizens or permanent residents of the United States. A student applying for aid under these programs, except for Veterans Benefits, must demonstrate financial need and maintain satisfactory academic progress standards. The Financial Aid Form is the document which provides information about financial need. The amount of financial need is an important factor in whether the aid applicant is selected for participation in these programs. All freshmen and transfers are considered to be making satisfactory academic progess based upon their admission to the College. However, after that point, satisfactory progress is measured by standards relating to hours earned and a cumulative quality point average. For further information see the College's financial aid brochure.

1. National Direct Student Loan-Students in need of financial aid may borrow up to $\$ 3,000$ in their first two years of college and up to $\$ 6,000$ in their undergraduate years. Repayment begins six months after a student discontinues college enrollment. The interest is five percent and repayment may be extended over a ten-year period.
2. Pell Grant -Authorized under the Higher Education Amendments of 1972, eligible undergraduate students may receive a Pell Grant ranging from $\$ 250$ to $\$ 1,900$. The exact amount of the award is determined by the Student's Aid Index which can be found on the Student Aid Report (SAR). The processing center in Iowa City, Iowa will send the SAR to the student's home address. Before any payment can be made for the student, all three copies of the SAR must be given to the Financial Aid Office.
3. Supplemental Educational Opportunity Grant-Under the Higher Education Act of 1965 and subsequent amendments, funds are available to colleges and universities for the purpose of providing scholarships to undergraduate students who show financial need. Awards vary from $\$ 200$ to $\$ 2,000$. Applicants must show academic or creative promise and must maintain satisfactory academic progress. Grants may be renewed from year to year for the first four years of undergraduate work provided: (1) the student continues to be in satisfactory academic progress, (2) financial need continues to be demonstrated, and (3) funding continues at a level which will sustain it.
4. College Work-Study Program-A number of job opportunities on campus can be filled by applicants who meet the provisions of this federally subsidized employment program. An applicant must be a full-time student or accepted to enroll as a full-time student, must have substantial financial need, must apply the wages earned toward college expenses, and must work under hours and conditions established by government regulations. Fifteen hours per week is a maximum work load without special permission.
5. Veterans Benefits-Students qualifying may use their benefits toward any program provided by Bridgewater College. While information concerning these benefits is available at the Office of Admissions, it is suggested that those interested confer with a representative of the Veterans Administration.

## Student Loan Funds

1. Guaranteed Student Loans-The money is borrowed by the student from participating home town financial institutions with an interest rate presently of eight percent. Interest does not accrue while the student is enrolled on at least half time status. The maximum amount is $\$ 2500$ per academic year. Also, while a student may have met the satisfactory academic progress standard, a GSL recipient cannot borrow more than $\$ 2,500$ at one grade level. Therefore, each year the student should be sure to move from one class level to the next. Please see page 91 of the catalog for classification of students. Repayment of the loan begins six months following graduation or termination of at least half-time student status. Interested students should contact their home town lending institution.
2. Virginia Education Loan Authority-A private lending agency designed to provide a source of guaranteed student loans to eligible students from Virginia who are unable to obtain loans from their local financial institutions. For further information contact the Financial Aids Office or the Virginia Education Loan Authority, 737 North Fifth Street, Richmond, VA 23219.
3. United Student Aid Funds-This is a private, non-profit corporation in which Bridgewater College has a reserve account to assist students in obtaining a guaranteed student loan. The provisions are the same as those listed above for the Guaranteed Student Loan program. The College must certify the student's standing and eligibility to receive interest benefits. Application forms may be obtained from the Office of Financial Aids.
4. Parent Loans to Undergraduate Students-A federal loan program designed to assist parents, independent students, and spouses to borrow money to pay for the student's undergraduate degree. The interest rate varies and is currently twelve percent and the loan amount is up to $\$ 3,000$ per academic year. Repayment begins within 60 days of disbursement of loan. See your local bank for the appropriate application.
5. Bridgewater College Loan Fund-A substantial fund has been established by numerous friends of the College to be loaned to worthy students who are especially in need of aid and whose character justifies it. The policy is to loan up to $\$ 300$ to sophomores, $\$ 400$ to juniors, and $\$ 500$ to seniors. Loans are made on a low rate of interest during the time the student is enrolled in college. The student is required to apply for a loan and give a note with parent's endorsement as security for the loan. Written applications must be filed with the Director of Financial Aids.
6. Church of the Brethren Loan Fund-The General Board grants a limited amount of its Rotary Loan Fund to each college affiliated with the Church of the Brethren for low interest-rate loans to students who are members of the Church of the Brethren. The appropriate forms may be obtained from the Office of Financial Aids.

## ACADEMIC EXCELLENCE <br> Career Opportunities

Some students-they are the fortunate ones perhaps-enter college having firmly decided on a vocation; many others enter knowing only in a general way what their vocational interests are. Specific suggestions about programs of study which will aid students in the former group to attain their various professional goals follow. The latter students are reminded that one of the purposes of a liberal education is to introduce them to varied fields of knowledge, and so give them a sound basis on which to make a wise career choice. At Bridgewater, students who have not chosen a field in which to concentrate can secure expert counseling from the career planning staff and from advisers and department heads who will take a strong personal interest in them.

## For the Student Going Into Business

A four-year curriculum leading to the Bachelor's Degree in either business administration or economics is provided.

## For the Student Going Into Computer Science

Completion of a curriculum leading to a Bachelor's Degree with a major in computer science and mathematics prepares one to enter graduate study in computer science or to pursue employment in this rapidly expanding field.

## For the Student Going Into Dentistry or Pharmacy

Admission to these schools may be obtained without the completion of the baccalaureate degree requirements. It is strongly urged, however, that students planning to enter either of them take the four-year program with a major in general science and secure the Bachelor's Degree as a background for the work of the professional school.

## For the Student Going Into Engineering

A dual degree program is offered in cooperation with Georgia Institute of Technology. A student who completes ninety units at Bridgewater College, including the general education requirements and the requisite courses in science and mathematics, may be admitted to G.I.T. where, in two additional years, the Bachelor's degree in one of several engineering fields may be earned at the same time a Bachelor's degree in liberal arts is earned at Bridgewater College. Those interested in this program should consult with the Dean for Academic Affairs and the Chairman of the Chemistry Department or the Chairman of the Physics Department.

## For the Student Going Into Forestry

A dual degree program is offered in cooperation with the School of Forestry and Environmental Studies at Duke University. A student who completes ninety units and the general education requirements at Bridgewater College may seek admission to this school. While the student may enter the School of Forestry and Environmental Studies with a background in one of several major fields, the student's program of studies must include Biology 201, 202; and Mathematics 130 or 132. Recommended courses are Computer Science 101, 105, Economics 210, and Mathematics 200. Those interested in this program should confer with the Dean for Academic Affairs and the Chairman of the Department of Biology.

## For the Student Going on to Graduate School

Bridgewater men and women planning careers in research, in the professions, or as college and university teachers enter the leading graduate schools in the United States each year to pursue work leading to the M.A., the Ph.D., or to some professional degree. Students interested in pursuing graduate studies should consult with their faculty advisers concerning appropriate preparation and application procedures.

## For the Student Going Into Government Service

Completion of a curriculum leading to the Bachelor's Degree, provided a suitable area of concentration has been selected, qualifies a person for some positions in government. A student interested in government service should confer with the appropriate faculty adviser.

## For the Student Going Into Home Economics

Completion of a curriculum with a major in home economics prepares the student for entrance into the following careers: retailing and merchandising, demonstration of food and textile products and of household equipment, food service and management, public school teaching, and homemaking.

## For the Student Going Into Law

Students seeking to pursue a career in law need an education which prepares them to read effectively, to write clearly, and to think analytically. An excellent general education and a concentration in any one of several fields provide the preparation needed. College debate experience and an internship in a law office in the junior or senior year can give valuable added preparation. Students who are interested in a career in law should confer with the Dean for Academic Affairs, their faculty adviser, and Professor Lamar B. Neal, Pre-Law Adviser.

## For the Student Going Into Medical Technology

Bridgewater College offers a bachelor's degree program with a major in Medical Technology in which the student studies three years at Bridgewater and twelve months at an accredited school or department of medical technology. See page 44 for details.

## For the Student Going Into Medicine

Completion of a curriculum containing a concentration in chemistry, biology, or general science is recommended. Because admission to medical school is highly competitive, the student is advised to plan with his or her faculty adviser a program of studies which will provide the best possible preparation for the Medical College Admissions Test.

## For the Student Going Into the Ministry or Religious Education

Completion of a curriculum leading to the Bachelor's Degree, provided a suitable concentration has been selected, qualifies a student adequately for admission to a theological seminary, for teaching religious education, or for doing church work.

ACADEMIIC EXCELLENCE

## Independent

Studies

## For the Student Going Into Social Work

A four-year program with a concentration in sociology leading to the Bachelor's Degree is recommended for those who wish to enter social work following graduation from college as well as for those who wish to pursue a graduate program in preparation for social work.

## For the Student Going Into Teaching

The College offers four-year curricula leading to the Bachelor's Degree and a State-Approved Program of teacher preparation at the kindergarten, elementary, and middle school levels as well as in several secondary fields. A student completing this program may be certified to teach in more than twenty states.

Freshmen courses are numbered 100-199; sophomore courses 200-299; and junior and senior courses 300-500.

With each course title is a number followed by one or more letters. The number designates the units of credit granted for the course, and the letters indicate when the course is offered: F stands for Fall Term; W for Winter Term; I for Interterm; and S for Spring Term. The College reserves the right to alter the schedule of courses as circumstances dictate.

Except for Internships, Independent Studies, Research, and Honors Projects, the courses of instruction are organized by departments. Opportunities for qualified students to engage in Internships, Independent Studies, Research, and Honors Projects are available in each department.

## 480. Internship (3FWIS)

The internship program of the College provides an opportunity for a student to gain field experience in an area related to the student's concentration or career goals. Supervision of an intern is provided by an appropriate faculty member and by a staff member of the agency or business in which the student is an intern. A student who wishes to engage in an internship must consult with the appropriate faculty member at least eight weeks in advance of the start of the term in which the internship is to be done. A description of the internship, signed by the student and the faculty sponsor, must be filed with the Director of Internships at least 20 days prior to the start of the internship. All internship projects must be approved by the Council on Education prior to the beginning of the term. To be considered for an internship, a student must have junior or senior status and at least a 2.00 quality point average. A student may enroll in an internship program for three units of credit in a term, and internship credit may be earned in subsequent terms subject to the limitations that no more than two internships may be pursued in any one agency or business and a maximum of nine units of credit in internships may be applied toward graduation.
490. Independent Study; 491. Research (3FWIS)

Upon approval of the Department and the Dean for Academic Affairs, a student with a cumulative quality point average of 2.20 or better may engage in an independent study or research project. One desiring to pursue independent study or research must submit a written description of the proposed work to the chairman of the appropriate department and to the Dean for Academic Affairs twenty days prior to the beginning of the term in which the study is to be conducted. All independent studies and research projects must be approved by
the Council on Education prior to the beginning of the term. At the end of the term, the supervising professor will file with the Registrar a grade for the student and a description of the work accomplished. Credit may be received for not more than three independent studies or research projects.
500. Honors Project (3FWIS)

An Honors Project is one in which a student researches a subject, by examination of relevant literature or by experimentation or both; the student reports the results in an accurately documented and well-written paper or appropriate representation of the work. Whenever the study deals with the subject of an established course, the student is expected to go well beyond the usual work of the course in research and in assimilation of the results as revealed in the report. Juniors and seniors with a cumulative quality point average of 3.20 or above may register for an Honors Project. One desiring to pursue an Honors Project must submit a written description of his or her proposed work to the chairman of the appropriate department and to the Dean for Academic Affairs 20 days prior to the beginning of the term in which the study is to be conducted. All Honors Projects must be approved by the Council on Education prior to the beginning of the term. At the conclusion of the Honors Project, the supervising professor files with the Registrar a grade for the student and a description of the work accomplished, and with the Library Director a copy of the written paper or appropriate representation of the work. It is the student's responsibility to provide the materials for the library in compliance with specifications approved by the Council on Education. The Library Director will arrange for binding and storage.

A major in Art consists of courses numbered 111, 112, 211, 218, 231, 232, 311, $312,321,322,430,460$ and either 401 and 402 , or 411 and 412 , or 421 and 422 . The requirement in applied art includes a senior show and gallery critique.
111, 112. Art Structure (3F, 3W)
First term: Two-dimensional problems in composition and properties in color. Second term: geometric and organic form in three-dimensional compositions.
211. Drawing (3F)

Emphasis upon life drawing in dry media which can serve as a basis for more personal and abstract development. The student is encouraged to develop compositional possibilities in abstract forms with the emphasis on color and/or wet media.
218. Introduction to Printmaking (3S)

Development of the woodcut and etching media from design to the completed print. Prerequisite: Art 111, 211, or permission of instructor.
221. Plaster, Cement and Concrete (3I)

Direct building methods and cast relief forms will be explored in the studio from the design, armature and mold construction, to the finishing of the materials. Prerequisite: Art 112 or permission of instructor.
231, 232. Art History (3F, 3W)
A survey from the prehistoric era through the 19th century. The emphasis is on painting, sculpture, and architecture. First term: Prehistoric to Renaissance. Second term: Renaissance through 19th Century.

311, 312. Beginning Painting (3W, 3S) Introduction to the basic craft of constructing and priming canvas, use of medium and oil pigments, and development of the evolutionary process of completing compositions. Personal direction is given each student.
321, 322. Beginning Sculpture (3F, 3W)
Introduction to basic sculptural techniques: modeling, casting, carving, constructing, in a variety of materials including clay, plaster, wood, and metal.
345. Visual Arts (3I)

An analytical approach to the visual arts using selected works for study. This course focuses on developing an appropriate perception level. Slide lectures and group discussion with at least a one-day trip to a selected gallery or museum.
401, 402. Advanced Drawing (3W, 3S)
Continued development in selected media for an emphasis in this area. Prerequisite: Art 211.

411, 412. Advanced Painting (3W, 3S)
Exploration of a wide range of painting techniques and media, with at least one term devoted to the acrylic pigments. Prerequisite: Art 311, 312.
421, 422. Advanced Sculpture (3W, 3S)
Exploration of a variety of sculptural materials. The student is encouraged to experiment with contemporary construction methods as well as further application of traditional processes. Prerequisite: Art 321, 322.
430. Art History: Twentieth Century (3S) Survey of the development of the arts from the Fauve and Cubist movements to the present. Prerequisite: Art 232.
450. Special Project (3FWIS)

Completion of drawings, paintings, or sculptures through concentrated effort on the part of each student. An appropriate project is chosen with the approval of the professor. Prerequisite: Junior or Senior art major.
460. Seminar (3S)

Various philosophical and critical essays related to twentieth-century works from various texts and periodicals. Includes critiques based upon field trips to museums and galleries for special exhibitions. Prerequisite: Permission of the department.

A major in Biology consists of a minimum of 32 units of course work within the department including 201, 202, 203, 311, 341, 350 and 411 . Supporting courses required for the major are Chemistry 121, 122 and Mathematics 120 and 130.
A major in General Science consists of 48 units including Chemistry 121, 122, 201, 202, 203; Physics 221, 222; Mathematics 120, 130; Biology 201, 203, plus six units in Biology courses numbered 300 or above. This major is intended primarily for pre-medical and pre-dental students and for prospective teachers of general science.
A major in Medical Technology requires a student to complete three years of study at Bridgewater College and a twelve-month program in a school or
department of medical technology. In the three-year curriculum at Bridgewater College, the student must earn 91 units of credit with a cumulative quality point average of 2.00, fulfill the general education requirements of the College, and earn an average of 2.00 on the following courses: Biology 201, 203, 300, 311, 313, 400, 410; Chemistry $121,122,201,202,203$; and Mathematics 120, 130. In the fourth year of the program, the student must complete the prescribed program in a school of medical technology which is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, and earn at least the equivalent of 32 semester units of credit with a 2.00 quality point average.
Biology 201 or permission of the instructor is prerequisite to all courses in the department numbered 300 or above except those offered in the Interterm.
100. The Nature of the Biological World (4FWS)

Basic life processes, the organization of life, and of life at the subcellular, cellular, organismal, and community levels. A course designed for the non-science major. Four lectures and one laboratory per week.
115. Wildfire Suppression (1F)

Forest fire behavior, basic forest fire fighting activities, and organization and management of the U.S. Forest Service. In addition to 16 hours of classroom instruction, the course includes field exercises and physical testing. Satisfactory completion of the course and associated physical tests qualify a person for an Inter-agency Fire Job Qualification Card.
201. Introductory Biology - Life at the Subcellular and Cellular Level (4F)

An introduction to the study of biology emphasizing subcellular molecular aspects of the science, the organization of life at the cellular level, and the implications of this knowledge in understanding of life in multicellular organisms. Four lectures and one laboratory per week. Prerequisite: Chemistry 103 or 121 or permission of the instructor.
202. The Biology of Plants (4W)

A survey of the plant kingdom and introductory work in plant science. Four lectures and one laboratory per week.
203. The Biology of Animals (4S)

Survey of the animal kingdom and introductory work in zoological science. Four lectures and one laboratory per week.
214. Economic Botany (3I)

How plants and plant products are used in industry. The course includes contacts with several industries in the area.
300. Microtechnique (3I)

Elementary procedures in the preparation of plant and animal tissues for study and research. Prerequisite: Chemistry 121. Two laboratories per week plus additional individual laboratory work.
305. Introduction to Human Anatomy (3F)

A study of the structure and function of the human body. Emphasis is placed upon the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems. Required of, and preference in enrollment will be given to, Physical Education and Health majors.
306. Physiology of Reproduction and Early Development (3I)

Evolutionary development of sexual reproduction and the concomitant development of methods of gestation. The course centers on the values of sexual versus

Biology (Cont.)
asexual reproduction including the meaning of clones, spermatogenesis, oogenesis, hybrid vigor, etc. Included is a complete discussion of the significance of true uterine development among the marsupials as well as mammals with particular attention given to placental physiology. Prerequisite: Biology 100, non-major.
310. Histology (3S)

A systematic treatment of the microscopic structure of tissues, organs, and organ systems of vertebrates.

## 311. General Physiology (3F)

An introduction to the physical and chemical aspects of function as applied to biology. Special attention is given to the concepts of passive and active diffusion as correlated with membrane structure, the nature and source of the action potential, and the mechanisms of contractility. Three lectures and one laboratory per week.
312. Cellular Physiology (3WI)

Fine structure and physiochemical phenomena of the cell with emphasis on intermediary metabolism, energy conversion, cell environment, and cellular regulatory mechanisms. Three lectures and one laboratory per week. Prerequisite: Biology 311 .
313. Vertebrate Systemic Physiology (3S)

Application of physiological principles to vertebrate systems with emphasis on the mammal. Laboratory exercises utilize various vertebrate forms for the study of the specific functional phenomena. Three lectures and one laboratory per week. Prerequisite: Biology 311.
341. Genetics (4F)

A balanced approach (classical and molecular) to the study of all aspects of heredity. Four lectures and one laboratory per week.

## 350. Ecology (4F)

Living organisms in the community. Four lectures and one laboratory per week.

## 365. Population Ecology (3S)

Analysis of the distribution and abundance of animal and plant populations; demography and models of population interactions, growth and regulation. Three lectures and one discussion per week. Prerequisite: Biology 350.
370. Introduction to Tropical Ecology (3I)

An introduction to the basic ecological concepts through lectures and field experiences in two selected tropical communities-the Florida everglades and the island of San Salvador where students will survey a well-developed tropical coral reef community. Prerequisites: Biology 100 or its equivalent and permission of the instructor.
400. Microbiology (4W)

An introductory survey of microbiology with emphasis on bacteriology. Three lectures and two laboratories per week.
410. Immunology (3I)

Development of immune responses through humoral and cell-mediated mechanisms with special emphasis on hypersensitivity reactions, artificial immunity, and serology. Prerequisite: Biology 203.
411. Comparative Vertebrate Embryology (4F)

A comparative study of vertebrate embryos, including the frog, chicken and pig. Three lectures and two laboratories per week.
412. Comparative Vertebrate Anatomy (4W)

A comparison of the anatomy of adult vertebrates and their evolutionary adaptations. Three lectures and two laboratories per week. Prerequisite: Biology 411.
420. The Spring Flora (4S)

Principles of botanical systematics with an intensive study of the spring flora of the Shenandoah Valley and neighboring areas. Extensive field work is included. Four lectures and one laboratory per week.
425. The Summer Flora (4Summer)

A survey of vascular flora of the Shenandoah Valley and the adjoining mountain ranges. Prerequisite: Biology 420 or permission of the instructor.
430. Evolution (3W)

A study of organic evolution: its historical development, as well as the processes of variation, natural selection, speciation and the origin of life. Four lectures per week.
460. Special Topics (3FWIS)

Studies from the areas of physiology, genetics, ecology, plant systematics, plant anatomy or plant physiology, and invertebrate zoology or entomology. Prerequisite: Permission of the department. Offered on demand.

A major in Chemistry consists of Chemistry 121, 122, 201, 202, 203, 300, 321, 460 and four additional units in Chemistry courses numbered 300 or above. Supporting courses consist of Physics 221, 222; Mathematics 120, 131, 132. The following courses are recommended for the student planning to pursue graduate study in Chemistry: Chemistry 322, 323, 420; Physics 340, 420; Mathematics 231, 232.

A major in Physical Science consists of Chemistry 121, 122; Mathematics 120, 131, 132, 231, 232; Physics 221, 222, 340, 460; and six additional courses numbered 300 or above chosen from among the Departments of Chemistry and Physics. This major is designed primarily for pre-engineering students and cannot be taken as a dual major with a major in chemistry or a major in physics.
102. The Earth and Its Physical Resources (4FS)

History of the earth's changes and its present structure, the availability of resources for man's uses, and the effects of pollution. Four hours lecture and one laboratory per week.
103. Fundamentals of Chemistry (4F)

Basic principles of structure, composition, and reactions of matter. This course is designed for the non-science major. While it may be used as a preparatory course for general chemistry, it does not satisfy requirements for a science major. Four hours lecture and one laboratory per week.
115. Creative Photography Techniques (3I)

Exploration of black and white and color photography processes from the inception and composition of a picture to its complete production. Picture composition, photographic equipment, darkroom techniques, specialized techniques such as photomicrography, uses of photography, and selling pictures is discussed. Experiences include taking, developing, printing, and enlarging photographs.

## Chemistry

120. Concepts in Physical Science (4S)

Basic principles which describe the nature of matter and the physical laws governing its behavior. Four hours lecture and one laboratory per week. Prerequisite: Mathematics 110 .
121, 122. General Chemistry (4W, 4S)
Basic principles and concepts of chemistry, the properties of the common elements, and a brief introduction to the more specialized areas of chemistry such as organic, nuclear, and biochemistry. Four hours lecture and one three-hour laboratory period per week. Prerequisite: Secondary school chemistry or permission of the department.
162. Chemistry in the World and Society (3I)

Introduction to the principles of chemistry and an examination of the ways in which it has affected society. For non-majors only. Credit may not be received for Chemistry 162 and either Chemistry 103, 121 or 122

201, 202, 203. Organic Chemistry (3F, 3W, 3S)
Theoretical, synthetic, and practical aspects of the aliphatic, aromatic, alicyclic, and heterocyclic organic compounds. Experiments are designed to teach the techniques of organic chemistry, general synthetic procedures, methods of purification, and identification of organic compounds. Three hours lecture and a minimum of three laboratory hours per week. Prerequisite: Chemistry 122.
300. Quantitative Analysis (4F)

Theories and practice of analytical separations and determinations. The laboratory work involves gravimetric, volumetric, and elementary instrumental analyses. Three hours of lecture and a minimum of six hours of laboratory per week.
310. Advanced Analytical Chemistry (4W)

Methods of chemical analysis using primarily electrical, optical, and chromatographic techniques. Examples are taken both from inorganic and organic chemistry. Three hours of lecture and a minimum of six hours of laboratory per week. Offered on demand.
321. Fundamental Physical Chemistry (4F)

Basic thermodynamics with its relationship to chemical equilibria. Electrolytic and nonelectrolytic solution phenomena are studied with emphasis on measurement of their properties. Electrochemistry, reaction kinetics, adsorption, colloids, and radio-chemistry are also introduced. Four hours lecture and three hours of laboratory per week. Prerequisite: Chemistry 122; Mathematics 131.
322. Theoretical Physical Chemistry (4W)

Kinetic theory and the laws of thermodynamics. Symmetry methods, modern theory of the states of matter, phase equilibria, chemical statistics, and atomic structure are introduced. Prerequisites: Chemistry 321; Mathematics 132; Physics 222. Offered on demand.
323. Chemical Bonding (3S)

Quantum mechanical development of the valence bond and molecular orbital theories of chemical bonding. Molecular structure and its relationship to molecular spectra are studied by use of specific examples from inorganic and organic chemistry. Four hours of lecture per week. Prerequisite: Chemistry 322. Offered on demand.
400. Biochemistry (4W)

Chemistry related to living cells, including a study of general physiochemical
aspects; the chemistry and metabolism of carbohydrates, proteins, lipids, nucleic acids, enzymes, vitamins, hormones, and minerals. Four hours of lecture and three hours laboratory per week. Prerequisites: Chemistry 201, 202, 203. Recommended: Biology 201.
420. Organic Qualitative Analysis (4W)

Chemical, physical, spectroscopic, and chromatographic separation, purification, and identification of organic compounds. Prerequisites: Chemistry 201, 202, 203. Three hours lecture and a minimum of six hours laboratory per week.
460. Chemistry Seminar (1S)

A special topic in chemistry culminating in the oral presentation of a research report. Library work and special current topics in chemistry are discussed, outside speakers are sponsored, and field trips to industries, research laboratories, and scientific meetings are taken. The equivalent of three class periods per week.

*     *         *             *                 * 

A major in Economics consists of Economics 200, 210, 410, 412, and four additional Economics courses approved by the department; Business 201, 202; and Mathematics 120, 130, and 200.
A major in Business Administration consists of Economics 200, 210, and three additional Economics courses; Business 201, 202, 370, 410, 420, two additional Business courses numbered 300 or above; and Mathematics 200.
Economics 200 is prerequisite to all other Economics courses except Economics 310. Business 100 or permission of instructor is prerequisite to all Business courses numbered 300 or above.

## ECONOMICS

200. Principles of Macroeconomics (3FWS)

Basic relationships between income, money, prices, and selected related problems. This course meets the needs of the non-major who wishes to develop an understanding of the fundamental concepts and methods used in the study of economic issues and problems.
210. Principles of Microeconomics (3WS)

Emphasis is on the economics of the firm, price and output relationships, the problem of distribution, and other related issues.
300. Money and Banking (3FS)

Classical and contemporary theory of money, banking, and the economic system as applied in the United States.
306. Case Study in Economic History: The Railroads (3I)

The American railroad system-historical development, technology, contributions to the economy, government regulation, and current problems and prospects. Visits will be made to the corporate headquarters of a major railroad and to the Smithsonian Museum in Washington, D.C. Prerequisite: Economics 200 or Economics 310.
307. Contemporary Economic Issues (3I)

Contemporary economic problems confronting the United States with emphasis on inflation, unemployment, and economic growth. Prerequisite: Economics 210.

Chemistry (Cont.)

## Economics and Business

Economics and Business
310. Economic History of the United States (3W)

Economic growth and development of the United States from the colonial period to the present. Emphasis is placed on changes in agriculture, industry, commerce, and finance. Alternate years; offered 1985-86.
320. Labor Economics (3S)

Development of the labor movement, the growth of the labor organization, economic theories of the labor market, and related contemporary topics.
410. Intermediate Microeconomic Theory (3W)

Basic concepts of conventional price theory. Emphasis is placed on theoretical conceptualization of microeconomic phenomena such as theories of demand, price determination, income, and market behavior. Offered on demand. Prerequisite: Economics 210 and permission of instructor. Alternate years; offered 1985-86.
412. Intermediate Macroeconomic Theory (3W)

Theory of money and income in the analysis of policy questions. Included are the determination and behavior of consumption, savings and investment affecting the total level of income and employment. Offered on demand. Prerequisite: Economics 210 and permission of the instructor. Alternate years; offered 1986-87.
420. Development of Economic Thought (3F)

The history of economic theories from earliest times to the present. Emphasis is on the important concepts and contributions of the various schools.
430. Comparative Economic Systems (3W)

Analysis of alternative systems of political economy. The mechanism of market economics is compared with the organization and administration of command economics. Mixed variations of each system are evaluated. Alternate years; offered 1986-87.
440. International Economics (3F)

Theory of international trade and finance. Emphasis is placed on monetary aspects of international relations including proposals for reform of the system.
450. American Industrial Structure and Public Policy (3W)

Microanalysis of theoretical and actual competitive structure in American industry as affected by existing legislation.

## BUSINESS

100. Introduction to Business (3FWS)

Survey of business organization and management: its goals, functions, and methods and their implementation.
203. Personal Finance (3I)

Principles of managing one's income with emphasis on budgeting, saving, borrowing, insurance, home buying and taxes.
201, 202. Principles of Accounting (3FW, 3WS)
First term: Accounting for a sole proprietorship, accounting cycle, journals, ledgers, working papers, and preparation of financial and operating statements. Second term: Accounting for partnership and corporations; analysis of financial statements and budgets. Business 201 is prerequisite to 202.
301, 302. Intermediate Accounting (3W, 3S)
Preparation and analysis of special financial statements, and an advanced treatment of accounting for corporations. Prerequisite: Business 202. Business 301 is prerequisite to 302 .
310. Federall Tax Accounting (3F)

Training in federal taxes and the federal tax structure. The application of basic principles to specific problems. Prerequisite: Business 202.
320. Auditing (3S)

Theory of auditing. The standards and ethics of the public accounting profession. Prerequisite: Business 301. Alternate years; offered 1985-86.
330. Cost Accounting (3F)

Principles of process and specific order cost accounting as applied to specific problems. Prerequisite: Business 202.
340. Advanced Accounting (3S)

Accounting for partnerships, consignments, insurance, and consolidated statements. Prerequisite: Business 301. Alternate years; offered 1986-87.
355. Business Communications (3I)

Practical experience in written and oral expression related to business subjects and in utilizing commercial formats.
370. Business Law (3S)

Fundamental principles of American law, contracts, negotiable instruments, agency, partnerships, corporations, and sales.
400. Introduction to Data Processing (3W)

Capabilities and limitations of unit record equipment and electronic computers, their operating principles, and the problems inherent in their operation and use.
410. Marketing (3FS)

Principles, policies, and practices in the distribution of goods.
415. Human Resources Management (3S)

The personnel function from the managerial perspective. Emphasis is placed on human resources planning, recruitment selection, employee and managerial development, and performance evaluation.
420. Management (3FWS)

Principles, policies, and practices of management. Emphasis is placed on structure, organization, decision-making, control, and personnel management.
430. Investments (3S)

Evaluation of the investment characteristics of the various types of securities with some emphasis on stocks and bonds.
440. Corporate Finance (3S)

Institutions, problems, organizations, and analytical procedures particular to financial management of business.

Bridgewater College provides a State-Approved Program for the preparation of elementary and secondary school teachers. Students who successfully complete this program and the National Teacher Examination receive certification in Virginia, and through reciprocal agreements among the State Directors of Teacher Certification, may receive initial certification to teach in 30 states, the District of Columbia, and the Overseas Dependent Schools. In addition to Virginia, the states are Alabama, California, Connecticut, Delaware, Hawaii, Idaho, Indiana, Kansas, Kentucky, Maine,

Economics and Business (Cont.)

Education

Maryland, Massachusetts, Michigan, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Washington, West Virginia, and Wisconsin.

The elementary education program prepares the student for certification to teach either the Nursery through Grade 4 level, Grades 4-8 level, or in the Middle School. The Secondary program includes the following areas of specialization: Biology, Chemistry, Driver Education, English, English and Dramatics, French, General Science 8 \& 9, German, Government, Health Education, Physical Education, History, History and Political Science, Home Economics-Vocational, Mathematics, Music, Physics, and Spanish.

Formal application for admission to the State-Approved Program should be made to the Department of Education no later than February 15 of the sophomore year, and persons expecting to major in Elementary Education should apply by the Spring Term of the Frehsman year. Upon admission to the Department of Education, the student may enroll in the beginning courses of the professional education sequence. The criteria used in evaluating an applicant are based upon the following:

1. A satisfactory quality point average on all work attempted prior to the time of initial application, as specified in the Teacher Education Handbook.
2. Recommendation of the department in which the student is a major.
3. Evidence of good character and personal relationships.
4. Evidence of good physical and emotional health.
5. Evidence of written and oral language ability.

Early in the student's junior year, and certainly by the end of the second term of the junior year, the prospective teacher must apply to participate in a student teaching experience. A second screening process is administered prior to the student teaching term wherein the criteria used are the same as before, except that the student must have attained the quality point average specified in the Teacher Education Handbook. As one of the prerequisites to student teaching, the student must engage in a planned program of observation and teacher aiding in a public school.

Each student expecting to prepare to teach follows the sequential steps listed below:

Freshman Year:
Counsel with faculty of the Department of Education. Persons planning to major in Elementary Education should apply for admission to the Department of Education by the Spring Term.

## Sophomore Year:

1. All prospective teachers should apply or have applied for admission to the teacher education program and be screened according to the criteria indicated above.
2. Begin education courses by enrolling in Educational Psychology and a curriculum course at either the secondary or the elementary level.
3. Be involved in the observation and teacher aiding experience.

## Junior Year:

1. Continue with education courses and with major subject field.
2. Apply for admission to student teaching and expect to be screened prior to the student teaching term according to the criteria listed above.
3. Plan additional work with young people in the summer.
4. Participate in student teaching during one term (see page 55).
5. Take the National Teacher Examination. The State Department of Education requires both Specialty Area and Core Battery Examinations.
6. Obtain an application for the Virginia Teaching Certificate from the Registrar's Office. (A nonreturnable application fee of $\$ 25$ is required by the State Department of Education.)
For the student seeking certification in Nursery through Grade 4, the major in Elementary Education consists of Education 300, 310, 320, 330, 332, 340, 350, 355, 360, 365, 415, 461, 462; Health and Physical Education 425; Home Economics 400; Mathematics 105 and 315; Music 412; and six courses in a single academic discipline.

For the student seeking certification in Grades 4-8, the major in Elementary Education or Middle Education consists of Education 300, 305, 310, 320, 330, 332, 340, 345, 355, 360, 365, 415, 471; Health and Physical Education 425; Mathematics 105 and 315; Music 412; and two concentrations of 15 semester hours each chosen from five specific subject areas.

Specific endorsement requirements further specify that the student complete Economics 200, English 300, Geography 340 or 350, History 201, Speech 200, and an additional physical education activity beyond the general education requirement.

Professional education requirements for certification at the secondary level include: Observation Teacher Aiding; Education 300, 310, 366; either 392, 394, 395, or 396; 410, 416, 430, 481; Health and Physical Education 200 and a third activity course; and History 201 or 202. Students who receive the B.A. Degree and seek certification to teach must complete 12 units in Science and Mathematics; Computer Science 101: Introduction to Interactive Computing is recommended.

## OBSERVATION AND TEACHER AIDING EXPERIENCE

Observation and teacher aiding is an important part of the teacher preparation program. This program involves the student in observing the teacher and pupils and in working with individuals and small groups under the direction of the teacher. Arrangements for the observation and teacher aiding experience must be made with the Department of Education. Most students are able to pursue this program during the academic year while others do so in cooperating schools in the late spring or late summer when college is not in session. In the case of summer experiences, applications must be filed by May 1 .

Thirty hours of observation and teacher aiding experiences are prerequisite to Student Teaching. In addition, certain courses at the College include visitation in public schools as a regular part of instruction. The prospective teacher is encouraged to seek further experience working with children and youth in recreation centers, day care centers, and the like.

Admission to the Teacher Education Program is prerequisite to all courses in the department except $250,300,305,310,340,365$, and 366 . In extraordinary circumstances exceptions to this policy may be granted by the Chairman of the Department of Education.
250. Field Experience in Education (3I)

A three-week experience in the public schools in observing and diding in teaching and learning activities. A project which relates the student's experiences to readings in the field is required.
300. Educational Psychology (3FWS)

Application of psychological principles of development, learning, and evaluation to the educational process. Special attention is given to the use of behavioral technology in the classroom.
305. Growth and Development in Late Childhood and Early Adolescence (3S) Physical, psychological, and social development of the older child and early adolescent.
310. Foundations of Education (3FWIS)

Historical, social, and philosophical foundations of education, with emphasis on the growth and complexities of the American public school system.
320. Language Arts in Grades NK-8 (3W)

Provides the students with an understanding of the related factors which influence the total language development of the child. Specific attention is given to the development of communication skills-writing, reading, speaking and listening at the various developmental levels.
330. Teaching of Reading-Developmental (3WS)

Methods, techniques, and materials used for teaching reading.

## 332. Teaching of Reading-Diagnostic (3S)

Evaluation of reading progress, diagnostic techniques, differentiation of instruction to fit needs, corrective methods for use in the classroom. Prerequisite: Education 330.
340. Literature for Children (3F)

A study of standard, classic, and current books with aids and criteria for selection, and with attention to problems of the reluctant and non-reader.
345. Social Studies Workshop in Grades NK-8 (3I)

The content of the social studies for the early and middle grades, methods of teaching social studies, appropriate materials and activities, and ways of organizing the group for effective learning experiences.
350. Teaching in the Kindergarten and Primary Grades (3S)

Methods, techniques, materials, and organization used in teaching in the kindergarten and primary grades. Special consideration is given to readiness for learning developmental characteristics of kindergarten and primary children, the role of play, and the activity program.
355. Art for the Early and Middle Education Teacher (3W)

Various art media utilized in the elementary school program. Student familiarization with the creative and mental growth of children is emphasized. Two three-hour studios per week.
360. Science for the Early and Middle Education Teacher (3S)

Biological and physical sciences as taught in the elementary and middle school.

## 365. The Exceptional Child (2S)

Psychological and behavioral characteristics of exceptional children. Attention is given to learning styles and the problems and potential of educating in elementary school settings. Problem solving and workshop approaches are emphasized
366. The Exceptional Student (2F)

Psychological and behavioral characteristics of the exceptional student. Emphasis is placed upon learning styles and the potential for educating handicapped and
gifted children in secondary schools. Problem solving and workshop approaches are employed.
392. Methods in Teaching English (1W)

Methods of teaching grammar, writing, and literature at the secondary level with special emphasis on adolescent literature.
394. Methods in Teaching Mathematics (1S)

Methods of teaching mathematics at the secondary level.
395. Methods of Teaching Science (1F)

Methods of teaching science at the secondry level with emphasis upon biology, chemistry, or physics depending upon the student's field of certification.
396. Methods in Teaching the Social Sciences (1W) Methods in teaching the social sciences at the secondary level.
400. Teaching of Foreign Languages (3F)

Teaching methodology, materials, and laboratory techniques and administration for prospective foreign language teachers.
410. Secondary Education (3W)

Objectives, curriculum practices, organizational patterns, and trends in the secondary school.
415. Seminar for the Early and Middle Education Teacher (1F)

Practical problems of the beginning teacher in elementary school. Corequisite: Enrollment in Education 461, 462, or 471.
416. Seminar in Teaching in the Secondary School (1FS)

Practical problems of the beginning teacher in the secondary school. Corequisite: Enrollment in Education 481.
430. Principles of High School Teaching (3I)

Instructional principles and practices at the secondary level, with special attention given to educational media and their use.

## LABORATORY EXPERIENCES IN TEACHING

Student teaching is offered for prospective elementary and secondary teachers during their senior years. Students are required to teach full days, and, while most student teachers may be placed in nearby schools, individual students may need to live off-campus in the community in which student teaching is available. In either case, the student is responsible for travel and personal expenses. Thirty hours of observation and teacher aiding is prerequisite to student teaching.
450. Supervised Teaching in Elementary Physical Education (10S)

Instructional planning, observation, and teaching under supervision in elementary physical education. In addition to prerequisites and conditions stated above, Health and Physical Education 426 is prerequisite to this course and the student must be enrolled in a program leading to certification at the secondary level.
461. Supervised Teaching in Nursery/Kindergarten (7F)

Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
462. Supervised Teaching in Grades 1-4 (7F)

Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
471. Supervised Teaching in Grades 4-8 (10FS)

Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
481. Supervised High School Teaching (10FS)

Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.

A major in English consists of 33 units including one course from 201, 202, 203; three courses from 341, 351, 361, 381, 391; one course from 401, 402; and one course from English 330, Drama 300, 320, 370, and Speech 200. English majors who seek certification to teach are also required to complete English 300, 310, Education 392, and Speech 200.
English 120 is a prerequisite to all courses in the department numbered 200 or above.
110. English Composition (3FW)

Fundamentals of composition and oral communication. This course is required for all students who score below a designated point on the English Placement Test.
120. Composition and Literary Forms (3FWS)

Development of the student's ability to write clearly and to speak effectively, with special emphasis upon the preparation of a research paper. The course includes study of the literary forms of the short story, drama, and poetry. Prerequisite: English 110 or satisfactory performance on the English Placement Test.
201. Western Thought in Literature: The Greek Foundation (3WS)

Examination of the thought and literature of the early Greeks that is foundational to western thought and culture, including Greek mythology, Greek drama, and selections from the works of Plato.
202. Western Thought in Literature: The Renaissance (3WS)

Readings in some of the basic works that express the world views of Renaissance humanism and reveal its influence on later literature.
203. Western Thought in Literature: The Modern World (3WS)

Readings in works that express the major concerns and views of man in the nineteenth and twentieth centuries, with emphasis on the latter.
205. Revolutionary Voices in Modern Thought (3I)

Designed to introduce the student to some of the most challenging minds of the modern age including Thoreau, Darwin, Marx, Freud, Gandhi, Schweitzer, Martin Luther King, Jr., and Einstein. An attempt will be made to present personalities as well as ideas of a revolutionary nature.
215. Science Fiction and Contemporary Issues (3I)

Examination of science fiction from both the scientific and literary perspectives. Concentrates on issues raised and addressed by science fiction.
300. Advanced Grammar (3W)

A brief consideration of the history of the English language, and study of structural linguistics and generative-transformation grammar.
310. Advanced Composition (3W)

Includes the writing of at least one theme a week and examination of methods of
teaching writing. This course is required of all prospective teachers of English. Alternate years; offered 1986-87.
311. Creative Writing (3W)

Provides the interested student with an opportunity to gain deeper insight into literary techniques and values by producing original essays, short and longer fictions, dramas, poems, song forms, and editorial sequences which express his emotions and his ideas. Writing workshops include individual conferences and group conferences for intensive criticism. Prerequisite: Consent of instructor. Alternate years; offered 1986-1987.
330. Shakespeare (3F)

A critical examination of Shakespeare's development as a dramatist and of his basic themes. Approximately seventeen plays are considered. Alternate years; offered 1986-87.
341. English Literature to 1500 (3F)

Poetry and prose of the Old and Middle English periods with special attention given to the Beowulf poet, the Pearl Poet, Langland, and Chaucer. Alternate years; offered 1985-86.
351. Seventeenth-Century English Literature. (3W)

Emphasis upon the work of major writers including Spenser, Donne, Herbert, Marvel, Jonson, and Bacon. Alternate years; offered 1985-86.
361. Eighteenth-Century English Literature (3W)

An examination of the works of Defoe, Swift, Addison, Pope, and Johnson, with inclusion of a few minor but significant writers. Alternate years; offered 1986-87.
365. Literary Tour of England and Scotland (3I)

A focus on places of literary interest in England and Scotland with emphasis on major British writers. The trip will also include visits to places of major historical and archeological interest including Stonehenge, Cambridge and Oxford Universities, and Canterbury Cathedral.
381. The Romantic Movement (3F)

The critical theories and poetry of Woodsworth, Coleridge, Bryon, Shelley, and Keats. Alternate years; offered 1986-87.
391. Victorian Literature (3S)

Critical examination of the poetry and prose of major writers of the period. Alternate years; offered 1985-1986.
401. American Literature to 1880 (3F)

Emphasis on Hawthorne, Melville, Emerson, Thoreau, Whitman, and Dickinson. Alternate years; offered 1986-87.
402. American Literature After 1880 (3W)

Major writings of several outstanding authors, beginning with Twain. Alternate years; offered 1985-86.
420. The Novel (3S)

Ten or eleven major novels illustrating the development of the English novel from its beginning through the nineteenth century. Alternate years; offered 1986-87.
455. Newspaper Writing and Editing (3F) Instruction and practice in writing news stories, human interest stories, reading copy, writing headlines, and other activities carried out by a newspaper staff.
200. Public Speaking (3FWS) Essentials of effective speaking and the principles of delivery and of speech composition.
210. Group Discussion: Theory and Technique (3F)

Essentials of effective use of the small group discussion as a method for reflective thinking and problem solving. Practice in small group deliberation is provided. Alternate years; offered 1985-86.
300. Highlights in Theatre History (3S)

Selected periods in the development of the theatre and of its relation to its culture; emphasis is on theatre practice, and theatrical personalities including actors, playwrights, and designers. Alternate years; offered 1986-87.
305. Oral Interpretation of Literature (3I)

Theory and practice in oral interpretation of a variety of forms of literature. During the first week, emphasis is on prose; during the second week, emphasis is on poetry; during the third week, final programs are organized, rehearsed, and performed for the public.
310. Elements of Play Production (3I)

Introduction to the theories and techniques of the modern theatre and of theatre production in particular. Fundamentals of directing, lighting, make-up, and costuming. Alternate years; offered 1986-87.
320. Modern Drama (3W)

The dramatic literature of selected playwrights from 1850 to the present. Alternate years; offered 1986-87.
330. Acting (3F)

Development of acting skills through both classroom and laboratory experiences in acting. The course includes a brief examination of the historical development of various acting theories and techniques. Alternate years; offered 1986-87.
345. Teaching and Directing Drama (3I)

Designed for the teacher of drama in the high school, the course examines methods whereby drama can be taught in the classroom and used as a teaching medium for other subjects. Over-all direction of an extra-curricular drama group is also examined including organization of such a group, activities, play selection, and other considerations not including actual play production techniques. Prerequisite: Consent of instructor.
370. English Drama to 1800 (3S)

Origins of English drama and representative plays from the Medieval and Tudor periods through Sheridan, exclusive of Shakespeare. Alternate years; offered 1985-86.

A major in French, German, or Spanish consists of a minimum of 37 units in courses numbered 200 or above including French 460, German 460, or Spanish 460, and participation in Brethren Colleges Abroad (see page 23 for a description of the Brethren Colleges Abroad Program). The student may apply to the Council on Education for an exception to the BCA requirements. Courses numbered 201 and 202 are prerequisite to all courses of a higher number unless the department determines that a student is otherwise qualified.

## FRENCH

101, 102. Elementary French (3W, 3S)
Introduction to the structure and practice of modern French. Prerequisite to French 102: French 101 or placement.
110. Live Lab: Beginning Conversation (1S) Oral practice in French at the beginning level. Corequisite: French 102.
111. Live Lab: Intermediate Conversation I (1F)

Oral practice in French at the intermediate level. Corequisite: French 201.
112. Live Lab: Intermediate Conversation II (1W) Oral practice in French at intermediate level. Corequisite: French 202.
201, 202. Intermediate French (3F, 3W)
Review of basic principles, and practice in speaking, hearing, and writing simple French. Reading of modern cultural and literary texts is included. Prerequisite to French 201: French 102 or placement. Prerequisite to French 202: French 201 or placement.
305. Paris and the Provinces (3I)

A visit to historical and cultural sites in and around Paris, including Versailles, the Loire Valley, Fontainebleau, and parts of Normandy and Brittany.
310. Conversation and Diction (3F)

Intensive practice, designed to promote fluency in speaking correct and idiomatic French. Alternate years; offered 1985-86.
315. Business French (3S)

A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, telephone conversations, letter writing, marketing projects, and simultaneous interpretation. Given in French.
320. Advanced Grammar (3F)

Study and analysis of advanced grammatical structures; translation exercises and some limited composition work.
321. Composition and Creative Writing (3W)

Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequisite: French 320.
330. Literature and Life of the Classical Period (3F)

Art and ideas of the significant classical writers and the social and historical background. Given in French. Alternate years; offered 1985-86.
340. Literature and Life of the Middle Ages and the Renaissance (3W) La Chanson de Roland, Le Roman de la rose, Villon, Rabelais, Montaigne, Du Bellay, Ronsard and others are studied in modern French. Their historical and social background are included. Given in French. Alternate years; offered 1986-87.
350. The Age of Enlightenment (3W)

The literary works of Voltaire, Rousseau, and other pre-Revolutionary writers. Social and historical background of the French Revolution. Given in French. Alternate years; offered 1985-86.
360. Special Topics (3FWIS)

Devoted to a subject chosen from the corpus of Francophone language, civilization, and literature. Possible topics include French African literature, phonetics, drama, French Canadian literature, civilization and culture of the French Caribbean. A student is allowed to take the course more than once, provided different topics are covered.
410. Culture and Civilization (3W)

Summary of the historical development of France; political, social, and educational institutions; and movements in art and music. Emphasis is on the life, customs, and character of the people today. Given in French. Alternate years; offered 1986-87.
420. Literature and Life of the Nineteenth Century (3F)

The Napoleonic period; Romanticism, Realism, and other literary and artistic movements; social and historical background. Given in French. Alternate years; offered 1986-87.
430. Literature and Thought of the Twentieth Century (3F)

Anatole France, Proust, Gide, Camus, Sartre, and others are studied to present the literary and philsophical currents of modern France. Given in French. Alternate years; offered 1986-87.
460. Senior Seminar (1W)

Discussion and oral presentation of a research paper by students on topics in Francophone language, culture, and literature.

## GERMAN

101, 102. Elementary German (3W, 3S)
Introduction to the structure and practice of modern German. Prerequisite to German 102: German 101 or placement.
110. Live Lab: Beginning Conversation (1S)

Oral practice in German at the beginning level. Corequisite: German 102.
111. Live Lab: Intermediate Conversation I(1F)

Oral practice in German at the intermediate level. Corequisite: German 201.
112. Live Lab: Intermediate Conversation II(1W)

Oral practice in German at the intermediate level. Corequisite: German 202.
201, 202. Intermediate German (3F, 3W)
Review of basic principles, and practice in speaking, hearing, and writing simple German. Reading of modern cultural and literary texts is included. Prerequisite to German 201: German 102 or placement. Prerequisite to German 202: German 201 or placement.
310. Conversation and Diction (3S)

Intensive practice, designed to promote fluency in speaking correct and idiomatic German. Offered on demand.
315. Business German (3S)

A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, telephone conversations, letter writing, marketing projects, and simultaneous interpretation. Given in German.
320. Advanced Grammer (3F)

Study and analysis of advanced grammatical structures; translation exercises and some limited composition work.
321. Composition and Creative Writing (3W)

Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequisite: German 320.
360. Special Topics (3FWIS)

Devoted to a subject chosen from the corpus of Germanic language, civilization, and literature. Possible topics include dialectology, scientific German, modern German literature, German American studies, music in German culture. A student is allowed to take the course more than once, provided different topics are covered.
460. Senior Seminar (1W)

Discussion and oral presentation of a research paper by students on topics in Germanic language, culture, and literature.

## SPANISH

101, 102. Elementary Spanish (3W, 3S)
Introduction to the structure and practice of modern Spanish. Prerequisite to Spanish 102: Spanish 101 or placement.
110. Live Lab: Beginning Conversation (1S)

Oral practice in Spanish at the beginning level. Corequisite: Spanish 102.
111. Live Lab: Intermediate Conversation I (1F)

Oral practice in Spanish at the intermediate level. Corequisite: Spanish 201.
112. Live Lab: Intermediate Conversation II (1 W)

Oral practice in Spanish at the intermediate level. Corequisite: Spanish 202.
201, 202. Intermediate Spanish (3F, 3W)
Review of basic principles, and practice in speaking, hearing, and writing simple Spanish. Reading of modern cultural and literary texts is included. Prerequisite to Spanish 201: Spanish 102 or placement. Prerequisite to Spanish 202: Spanish 201 or placement.
245. Mexican Culture (3I)

A carefully planned trip to Mexico City with excursions to outlying places of interests. Experiences include the Indian town of Toluca and its huge market, Chapultepec Castle, Archeological Museum, bullfights, U. S. Embassy, Folk-
loric Ballet of Mexico, a movie in Spanish, church service in Spanish, and the Chapultepec Castle, Archeological Museum, bullfights, U. S. Embassy, Folk-
loric Ballet of Mexico, a movie in Spanish, church service in Spanish, and the pyramids of Toetihacan.
310. Conversation and Diction (3S)

Intensive practice, designed to promote fluency in speaking correct and idiomatic Spanish. Alternate years; offered 1986-87. 315. Business Spanish (3S)

A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, tion with practice in the art of commercial communication, including interviews, interpretation. Given in Spanish.

Foreign
Languages (Cont.)
320. Advanced Grammar (3F)

Study and analysis of advanced grammatical structures; translation exercises and some limited composition work.
321. Composition and Creative Writing (3W)

Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequsite: Spanish 320.
360. Special Topics (3FWIS)

Devoted to a subject chosen from the corpus of Hispanic language, civilization, and literature. Possible topics include Golden Age drama, Alfonso Sastre, phonetics, music in Latin America. A student is allowed to take the course more than once, provided different topics are covered.
410. Spanish Culture and Civilization (3F)

The historical development of Spain and Spanish America; political, social, and educational institutions; movements in art and music. Emphasis is on the life, customs, and character of the people today. Given in Spanish. Alternate years; offered 1985-86.
420. Medieval and Golden Age Literature and Life (3W)

Spanish masterpieces dating from the epic, El Cid, through the works of Cervantes, Lope de Vega, Calderon, and others. Alternate years; offered 1985-86.
431, 432. Spanish American Literature and Culture (3F, 3W)
Representative authors from the discovery of the Americas through the nineteenth century. Modern Spanish writers of the Americas are studied and social and historical background is included. Given in Spanish. Alternate years; offered 1985-86.
440. Literature and Life of the Nineteenth Century (3F)

The principal peninsular writers of Romanticism and Realism and the society in which they lived. Given in Spanish. Alternate years; offered 1986-87.
450. Literature and Thought of the Twentieth Century (3W)

Outstanding writers of the Generation of 1898 and of contemporary Spain, including Unamuno, Baroja, Lorca, Jimenez, Cela, and others. Given in Spanish. Alternate years; offered 1986-87.
460. Senior Seminar (1W)
'Discussion and oral presentation of a research paper by students on topics in Hispanic language, culture, and literature.

## RELATED COURSES: LINGUISTICS

300. General Linguistics (3S)

Introduction to linguistic science. Descriptive linguistics: phonemics, morphemics, syntax; comparative-historical linguistics. Prerequisite: Foreign language at the intermediate level or permission of the instructor.
400. Teaching of Foreign Languages (3F)
(See Education 400.)

A major in Health and Physical Education consists of not less than 42 units, including three activity courses, one of which must be a swimming course, and courses numbered $300,310,320,335,340,350,360,365,368,426,440,3$ courses from 371-380, and Biology 305.
A major in Health Education consists of not less than 39 units and includes courses numbered $300,310,320,335,340,440$, Chemistry 103 or 121, Biology 201, 305 and 400, Sociology 200 and either 260 or 410, Home Economics 240 and either Education 305 or Home Economics 400.
Skill development in physical activity is a part of the general education program. Each activity course meets three hours per week for a term and carries one unit of credit. An activity may be repeated for credit only at a higher level of proficiency. No more than four units of credit in activity courses may be applied toward graduation. The activities offered are listed below.

| 110FS. | Archery | 180W. | Fitness and Weight Control |
| :--- | :--- | :--- | :--- |
| 115W. | Badminton-racquetball | 185FS. | Horseback Riding |
| 120W. | Bowling | 190S. | Cycling |
| 125. | Modern Dancing (1W). | 210FS. | Intermediate Archery |
|  | Offered 1984-85 | 215W. | Intermediate |
| 126. | Aerobic Dancing (1W). |  | Badminton-racquetball |
|  | Offered 1985-86 | 220W. | Intermediate Bowling |
| 130F. | Field Hockey | 225W. | Intermediate Dance |
| 135FS. | Golf | 235FS. | Intermediate Golf |
| 140W. | Gymnastics | 240W. | Intermediate Gymnastics |
| 145W. | Handball | 245W. | Intermediate Handball |
| 150S. | Lacrosse | 252W. | Intermediate Snow Skiing |
| 152W. | Snow Skiing | 262WS. | Intermediate Swimming |
| 155F. | Soccer | 265FS. | Intermediate Tennis |
| 160F. | Softball | 285F. | Intermediate Horseback Riding |
| 162FWS. | Swimming | 362FS. | Lifesaving |
| 165FS. | Tennis |  |  |
| 170W. | Volleyball |  |  |
| 175S. | Conditioning and Weight Training |  |  |
| 177W. | Fitness-Jogging |  |  |

200. Health (1W)

Acquaints the student with principles and practices of healthful living. The relationship of physical fitness, mental hygiene, and common ailments to personal health is emphasized. Three periods per week for five weeks.
300. Personal and Community Health (3F)

Contemporary health problems: mental health, exercise and weight control, stimulants and depressants, communicable diseases, and marriage and family relationships.
310. History and Principles of Health and Physical Education (3S)

Relationships of fields of health, physical education, and recreation to each other and to general education. Study of historical and philosophical backgrounds. Analysis of objectives of physical education based on the principles of physiology, psychology, and sociology.
320. Kinesiology (3W)

Human motion including the mechanical, anatomical, and physiological principles that govern the moving body. A review of selected body structures and an

Health and
Physical
Education

Health and Physical Education (Cont.)
analysis of simple movements is included.
330. Introduction to Human Anatomy and Physiology (3F)

Structure and function of the human body. Skeletal, muscular, nervous, and circulatory systems are emphasized with concentration on their relationships during exercise.
335. Physiology of Exercise (3I)

Basic physiological concepts of the nervous, muscular, and energy systems. Included is the effect of exercise on such functions as circulation, respiration, and temperature regulation. Prerequisite: Biology 305.
340. Health Education Concepts (3W)

Administration of school health programs, including health instruction, environment and services. Methods and materials used in teaching health and available resources in the field are also covered. Experiences in unit structure and application of teaching techniques are provided. Prerequisite: Physical Education 300 or consent of the instructor.
350. Tests and Measurements (3S)

Methods used in finding the abilities and ratings of students in health and physical education. Tests and measurements of physical fitness, social efficiency, and motor and physical skill.
360. Organization and Administration of Health and Physical Education (3F)

Desirable standards and policies in the organization, supervision, and administration of health education and physical education on all school levels and in all phases of the program.
365. Methods in Individual and Dual Sports (3S)

Designed to increase the knowledge and skill of the student in numerous individual and dual sports. Readings from noted authors, construction of teaching units, and experience in teaching several activities increase the student's knowledge and skills in the field.
368. Psychology in Teaching and Coaching (2W)

How basic psychological learning principles apply to the acquisition of motor skills in teaching and coaching situations. Motivation, discipline, aggressiveness, various approaches to coaching, the problem athlete and other psychological implications emanating from athletic competition are discussed.

## 371-380. Teaching and Coaching Methods and Techniques

Techniques of teaching and coaching popular sports from basic fundamentals to detailed strategies. Organizational methods and administrative concerns particular to the specific sport are included.
371. Coaching Football (2F)
372. Coaching Track and Field (1S)
373. Coaching Basketball (2W)
374. Coaching Baseball and Softball (1W)
375. Coaching Tennis (1F)
376. Coaching Field Hockey (1F)
377. Coaching Volleyball (1F)
378. Coaching Gymnastics (2W)
379. Coaching Soccer (1F)
380. Coaching Wrestling (1W)
385. Adaptive Recreation (3I)

Exposure to the recreational needs and capabilities of the physically and mentally handicapped. Orientation to wheelchair sports and practical experience in their leadership comprise a major part of the course. Opportunities for working in art, crafts, drama, and music are available for persons qualified in these areas. Prerequisite: Consent of instructor.
420. Leadership in Recreation (3I)

Recreation in the home, school, church, youth and other community organizations. Practical work in social and recreational activities. The course is designed for those who wish to specialize in recreational leadership and arts and crafts.
425. Health and Physical Education for the Early and Middle Education Teacher (3I) Experiences and techniques of teaching health, physical education, and recreational activities in elementary school. Emphasis is placed on movement education, and practical experiences are gained in actual teaching situations. Prerequisite: Education 300 and Education 320 or Physical Education 340.
426. Movement Experiences for Elementary Children (3W)

Basic concepts and techniques in movement education, including elementary gymnastics and rhythmic activities. Opportunities for practical application of movement education teaching techniques are provided. Prerequisite: Education 300 or consent of instructor.
440. Safety and First Aid (3S)

Fundamentals of administering first aid in all its aspects with attention to the prevention and treatment of athletic injuries. Special emphasis is placed on general safety procedures surrounding activities of school, college, and community environments.
445. Driver Education (3IS)

Designed for the student who plans to teach driver education. Included are critical analysis of traffic accidents, relation of attitude factors to safety, essentials of automobile operation, and traffic laws and regulations. Experiences include the use of psychophysical and psychological tests in the development of driving skills and practice in driving instruction. Prerequisite: Admission to the secondary education program or consent of the department.

*     *         *             *                 * 

A major in History consists of courses 201, 202, 301, 302, 330, 350, 360, 370; 410, 420, or 430; and 6 units of electives in History. Prerequisites to a major in History are History 101, 102, 103.
A major in History and Political Science consists of 18 units of credit in History, including History 201, 202, 301, and 302; 12 units of credit in Political Science; 6 units of credit in either History or Economics; and 6 units of credit in either Political Science or Geography. Prerequisites to a major in History and Political Science are History 101 or 102, and History 103.
A major in International Studies consists of History 101, 102, 103, 201, 202, and 30 units of credit in appropriate courses with at least one course selected from each of the following areas: Economics 430, 440; History 350, 380, 410; History 400, 420, 430; Political Science 410, 430; Religion 340, 350; Sociology 430, 440. Appopriate courses from Interterm offerings may be included in this concentration, and participation in Brethren Colleges Abroad is strongly recommended.

Health and
Physical Education (Cont.)

## History

and
Political
Science

## History

and Political Science (Cont.)
101. Western Civilization to 1500 (3F)

The contributions to our present-day civilization of the ancient Near East, the Greeks and the Romans, the early and medieval Christian Church, and the Renaissance.
102. Western Civilization from 1500 to 1815 (3W)

The contributions to our present-day civilization of the Protestant Reformation, the Divine Right of Kings, the scientific revolution, and the political revolutions in England, America, and France.
103. Western Civilization since 1815 (3S)

The contributions to our present-day civilization of rapid political, military, economic, scientific, intellectual, and social changes in Europe and the United States.
201. United States Civilization before 1877 (3F)

The development of a new civilization which began with the English settlement in Virginia is emphasized. The ties with England were severed during the American Revolution, which was followed by the rise of a new nation in the United States. At the same time, sectional problems evolved which led to the Civil War and Reconstruction. In all of these events Virginians were playing a significant role as the United States developed a democratic government politically and a free enterprise system economically.
202. United States Civilization after 1877 (3W)

In the years following 1877, the United States continued to change industrially and agriculturally as the result of technological developments. In addition, the course examines political, military, economic, social, and intellectual changes of the period.
272. The Civill War (3I)

A comprehensive survey of the causes, the events, and the consequences of the American Civil War. Special attention will be given to military campaigns here in Virginia. Jackson's Valley Campaign will be studied in detail.
301. Modern Europe prior to 1870 (3W)

From the French Revolution to 1870 with emphasis upon the consideration of the forces of nationalism and liberalism. Prerequisites: Two of the following: History 101, 102, 103; or permission of the department.
302. Europe since 1870 (3S)

Events following the Franco-Prussian War and leading up to the First World War. Cultural and economic factors as well as international, domestic, political, and military history are considered. Prerequisites: Two of the following: History $101,102,103$; or permission of the department.
308. The Vietnam Conflict (3I)

A study of the Vietnamese conflict from the days of French rule to the present. Emphasis will be on the development of Vietnamese nationalist and revolutionary movements and the impact and consequences this had in Vietnam and among other powers involved, particularly France and the United States. Prerequisite: History 101, 102, 103, 201, or 202.
320. Renaissance and Reformation (3F)

Humanism, Renaissance art, the development of modern statecraft, and the emergence of a capitalist economy. The sixteenth-century religious upheavals,
the emergence of the modern European state system, and the economic impact of the overseas discoveries.
330. England and the British Empire (3F)

Social, constitutional, and diplomatic developments in England, with special emphasis upon the effects of the industrial revolution.
340. War and Peace in the Modern World (3I)

Military history with emphasis on European developments of the past 200 years.
350. Diplomatic History of the U.S. (3F)

American foreign policy with reference to political, social, and economic development shaping that policy. Prerequisite: History 201, 202.
360. American Constitutional Development
(See Political Science 360.)
370. Social and Intellectual History of the U.S. (3S)

American culture from earliest settlements to present day. Prerequisite: History 201, 202. Alternate years; offered 1985-86.
375. The Age of Jefferson and Hamilton (3S)

Political and social history of the Republic from 1789 to 1809 with emphasis upon the origins of American political parties. The trouble between the Federalists and the Jeffersonian Republicans, the ideologies of the early party leaders, and the impact of the party system on our society's later development are considered. Prerequisites: History 201, 202.
380. Seminar in the Twentieth-Century United States (3F)

Divergent historical interpretations of selected significant developments in United States history since 1900. Prerequisite: History 202. Alternate years; offored 1986-87.
400. History of Russia (3FS)

Political, social, and diplomatic activities in the Russian sub-continent with special emphasis upon twentieth-century developments.
410. Latin America (3W)

Colonies of Latin America, their struggles for independence, and the trends and developments since independence.
420. East Asia (3W)

Survey of East Asia (China, Korea, Japan), exploring the traditional sources of its civilization: political, socio-economic, and cultural. Emphasis is upon the impact of the West and the consequent evolution of modern East Asia. Alternate years; offered 1985-86.
430. Southeast Asia (3S)

Historical development of mainland and island Southeast Asia with particular stress upon the traditional societies of the area and the sources of its civilization. The impact of and response to the West provides a focus for the study of present-day Southeast Asia. Alternate years; offered 1985-86.
445. Roots (3I)

Techniques of ancester tracing, e.g., how to use public records, especially those of public libraries, court clerks, and perhaps national archives.

History
and
Political
Science (Cont.)

## POLITICAL SCIENCE

300. United States Government (3F)

Theories underlying the state, the formation of the Federal Union, the functions of departments, and the duties as well as the relation of the several states to the Federal Government.
310. State, City, and Rural Government (3W) States in the nation, their constitutions, problems of administration, departments, officials, and their duties, and some present trends from states' rights to centralization.
326. Introduction to Public Administration (3I)

Description of the development of the American public administrative system, decision-making processes, and characteristics of the major systems. Emphasis is placed on an analysis of public sector decision-making in such areas as law enforcement, health, welfare, utilities, education, housing and urban renewal. Visits are made to seyeral cities which are studied as model cases; and officials responsible for decision-making are interviewed.
330. American Political Parties (3S)

Political parties and elections in the United States. Alternate years; offered 1985-86.
360. American Constitutional Development (3W)

A survey of the development of the American Constitution through judicial interpretation. The nature of the judicial process, national-state relationships in the federal system, interrelationships of the legislative, executive, and judicial branches of the national government, individual civil rights and liberties will be analyzed. Alternate years; offered 1986-87.
400. History of Political Theory (3W)

Analytic survey of political thought from Socratic principles to modern ideologies. Alternate years; offered 1986-87.
410. Comparative Government (3S)

Descriptive analysis of the major European political systems of the current period. Alternate years; offered 1985-86.
430. International Relations (3S)

Basic issues and areas of conflict among the states in the contemporary world, and organizations for the conduct of international relations with particular reference to the United Nations. Alternate years; offered 1986-87.

## 435. Congressional Law Making (3I)

Studies of selected problems in government. The course requires the study and evaluation of the forces and factors in law making and in administrative policy making. Students attend legislative sessions, committee hearings and interview legislators, members of their staffs, administrators, and representatives of pressure groups. Prerequisite: Political Science 300.

## RELATED COURSES: GEOGRAPHY

340. Regional Geography (3F)

Geography of the major geographic and cultural regions of the world. Impact of physical environment upon culture and civilization of the regions. Alternate years; offered 1986-87.
350. Physical Geography (3F)

The importance of land forms, weather and climate, natural vegetation, soils, minerals, and their impact upon man's cultural development. Alternate years; offered 1985-86.

*     *         *             *                 * 

All majors in Home Economics complete the following basic core (15 units): 102, 201, 321, 400, and 430.
A major in Home Economics leading to the B.A. degree consists of a minimum of 30 units of courses including the core courses and others approved by the Department (excluding courses in professional education).
A major in Home Economics leading to the B.S. degree consists of a minimum of 45 units including the core courses plus additional courses approved by the Department. This general Home Economics program may include an emphasis in any of the following areas: Clothing, Textiles, and Home Furnishings; Foods and Nutrition; Household Equipment and Housing; Family Services.
A student desiring certification in secondary school teaching completes the core courses plus six units in each of the following areas of Home Economics-Family and Child Development; Housing, Home Furnishings and Equipment; Foods and Nutrition; Clothing and Textiles; Family Economics and Home Management. In addition, certification requires Home Economics 110, 340, 450, 471, and 481; Education 300, 310, 366, History 201 or 202, and Health and Physical Education 200.
102. Clothing Selection and Construction (3W)

Factors influencing fashion, including the sociological and psychological aspects of clothing, wardrobe analysis, and basic construction. Three three-hour laboratories per week.
110. Orientation to Home Economics Professions (3F)

An exploration of the field of Home Economics and its career opportunities.
201. Food Fundamentals (3W)

Basic cookery, nutrition, and principles involved in food selection, preparation, and preservation. Two hours lecture and six hours laboratory per week. Alternate years; offered 1985-86.
202. Meal Management (3I)

Application of foods and nutrition, time, and money management principles to meal planning, preparation, and service, including quantity food service and with emphasis on management practices. Prerequisite: Home Economics 201 or consent of professor.
210. Art and Design (3F)

Consideration of the principles of design, art, and color, with application in the fields of home decoration and clothing design. Alternate years; offered 1986-87.
220. Flat Pattern Design (3F)

Development of dress designs, utilizing the principles of flat pattern design and fitting. An original garment is designed and constructed as becoming to the individual. Three three-hour laboratories per week. Prerequisite: Home Economics 102. Alternate years; offered 1985-86.

History
and
Political
Science
(Cont.)

Home
Economics
230. Textiles (3S)

Textile fibers, tests for identification, yarn and fabric constructions, methods of finishing, characteristics, uses and economics of textiles. Three hours lecture and three hours laboratory per week.
240. Contemporary Nutrition (3F)

Basic nutrition concepts, nutrition needs throughout the life cycle and current nutrition issues. Three hours lecture and one three-hour laboratory per week. Alternate years; offered 1985-86.
250. Cultural Food Patterns (3I)

The importance of food and nutrition in individual lives, communities, and nations. This course develops an understanding of food customs and the influence of culture and religion on food habits, with emphasis on the non-western or Third World nations. Problems in nutrition and solutions currently being tried or projected through national, international, and voluntary agencies are studied. Laboratory experiences emphasize cultural influences on foodways
260. Courtship, Engagement, and Marriage (See Sociology 260.)
300. Tailoring (3F)

Problems in fitting and tailoring techniques as applied in the construction of coats and suits. Three three-hour laboratories per week. Prerequisite: Home Economics 102. Alternate years; offered 1986-87.
301. Family Clothing (3W)

Clothing needs throughout the life cycle and construction of selected projects requiring advanced techniques. Two lectures and two three-hour laboratories per week. Prerequisite: Home Economics 102. Alternate years; offered 1985-86.
302. Fabric Design (3W)

Study of methods of fabric construction and design both structural and applied. Application of principles of art and design to designing fabric or original pattern and constructing a garment from that fabric. Two lectures, 6 hours laboratory per week. Prerequisite: Home Economics 102, 210, and 230. Alternate years; offered 1985-86.
304. Fashion Merchandising (3W)

Consideration of the major factors involved in buying and merchandising fashion products. Discussion of the dynamics of fashion: consumer buying patterns, fashion buying, and fashion makers and retailers. Three hours of lecture, one three-hour laboratory per week. Prerequisite: Home Economics 102 or Business 100. Alternate years; offered 1986-87.
306. Fashion Promotion (3I)

Investigation and application of effective promotional procedures of retail organizations including display, publicity, fashion show production, and various modes of advertising. Three hours lecture and three hours laboratory per week. Prerequisite: Home Economics 304 or consent of professor. Alternate years; offered 1986-87.
315. Advanced Foods (3S)

Physical and chemical changes occuring in food preparation and factors influencing those changes. Time is given to methods of elementary food research, methods of food demonstration, and food for special occasions. Alternate years; offered 1985-86. Prerequisite: Home Economics 201.
321. Housing (3W)

Aesthetic and economic factors and current problems in planning for family housing needs. Alternate years; offered 1985-86.
322. Interior Design (3W)

The interior environment of the home; selection, use, and care of home furnishings. Prerequisite: Home Economics 210 or Art 111. Alternate years; offered 1986-87.
330. Household Equipment (3F)

Principles involved in intelligent choice, care, and efficient operation of equipment in the home. Consideration is given to research findings and technological advances. Three hours of lectures and one three-hour laboratory per week. Alternate years, offered 1986-87.
340. Methods of Teaching and Communicating Home Economics (3F)

Objectives, organization of materials, planning, special methods and techniques of communicating Home Economics. Consideration is given to current trends in Home Economics education and to presenting Home Economics to the general public. Prerequisite: Junior classification. Alternate years; offered 1986-87.
400. Child Growth and Development (3FS)

Physical, psychological, and social development of the child in the family. Provisions are made for observing and working with preschool children. Prerequisite: Sophomore, Junior, or Senior classification.
401. Historic Costume (3I)

Historical, literary, and artistic background of the costume of various countries from early civilizations to the present. Prerequisite: History 101, 102 or 103.
408. Parent and Child Relationships (3I)

Parent-child interactions through the child-rearing years. The roles of parents, the changing nature of the parent-child relationships throughout life-cycle stages, and changes in contemporary family structures with concomitant effects on parent-child relations are considered. Alternate years; offered 1986-87.
410. Sociology of the Family
(See Sociology 410).
412. Perspectives on Aging (3I)

Introduction to geriatrics with emphasis on current issues including family and societal responsibilities, housing, clothing, economics, and nutritional needs. Opportunities are provided for observation of residential and intermediate facilities and for field experiences with appropriate agencies.
415. Advanced Nutrition (3W)

The function of nutrients, their metabolic roles, nutritional status assessments, and current research trends are emphasized. Experimental animals are used for nutritional deficiency studies. Prerequisite: Chemistry 121 or approval of department. Alternate years; offered 1986-87.
425. Consumer Economics (3W)

Basic principles of economic systems in relation to standards in selection of goods and services and sources of reliable consumer information. Prerequisite: Economics 200.
430. Home Management (3F)

Management process and its significance on the quality of life experienced by

Home
Economics (Cont.)

Mathematics and Computer Science

> Home Economics (Cont.)
> families with consideration of values, goals, standards, decision making and resources. Prerequisite: Junior or Senior classification.
> 450. Vocational Home Economics (3W) Laws governing vocational home economics, its management, and vocational guidance. Problems in teaching home economics, organization and administration of vocational home economics programs in high schools, and the relation to state and national programs. Prerequisite: Home Economics 340.
460. Professional Home Economics Practicum (3 or 6S)

Field experiences in occupations related to home economics. Opportunities, qualifications, skills, and professional standards and ethics are studied. Two hours per week in class and a minimum of 100 (3 units) or 200 ( 6 units) hours of field experiences. Prerequisite: Senior classification.
471. Occupational Home Economics (3F)

Methods of developing, teaching, and supervising programs in occupational home economics. Human relationships and career opportunities in home economics are included. Alternate years; offered 1985-86.
481. Supervised High School Teaching (10S)
(See Education 481.) Prerequisite: Home Economics 450 and 471.

A major in Mathematics consists of Mathematics courses numbered 120, 131, $132,216,231,232,400,410,420,460$, and nine additional units in Mathematics chosen from courses numbered 300 and above.
A major in Computer Science and Mathematics consists of courses in Computer Science numbered 110, 250, 320, 340, 420, and 440; courses in Mathematics numbered 120, 131, 132, 231, 325, 330, 340, 350, and 460; and either Business 201 and 202 or Physics 221 and 222. This major may not be taken as a dual major with mathematics.

## MATHEMATICS

105. Generall Mathematics (3WI)

Specifically designed for students majoring in elementary education. Topics to be covered include: number systems, fractions, decimals, metric system, problem solving, and the basic concepts of two- and three-dimensional geometry. Emphasis will be placed upon understanding and the teaching of these concepts. Credit may not be received for both Math 105 and Math 108.
108. Finite Mathematics (3FWIS)

Algebraic problem solving, functional relationships, probability, mathematics of finance, and logic. This course emphasizes practical mathematics for the nonmathematics major. Credit may not be received for both Math 105 and Math 108.

## 110. College Algebra (3FW)

Addition and multiplication of signed numbers, factoring, linear equations, quadratic equations, graphing, and exponential and logarithmic functions. A student may be exempt from topical portions of the course by examination.
120. Precalculus Mathematics (3FW)

A precalculus course for students continuing in mathematics. Includes topics in
algebra, functions and relations, and trigonometry. Prerequisite: Mathematics 110 or satisfactory performance on placement tests.
125. Analytic Geometry (3I)

A review of algebraic and geometric properties of lines, conic sections, transformation of coordinates, and polar coordinates. The course is intended as an introduction to topics encountered in calculus but which are not covered in Mathematics 120. Prerequisite: Mathematics 110 or satisfactory performance on placement test.
130. Survey of Calculus (3S)

Differential and integral calculus for the student who needs a working knowledge of the subject but does not plan to pursue more advanced study in mathematics. Includes theory and application of limits, derivatives, and integrals. Prerequisite: Mathematics 120 or satisfactory performance on placement test. Credit may not be received for both Mathematics 130 and Mathematics 131.

131, 132. Calculus II, III (3W, 3S)
A unified course in analytic geometry and calculus of two dimensions. Prerequisite: Mathematics 120 or satisfactory performance on placement test. Credit may not be recieved for both Mathematics 130 and Mathematics 131.
200. Introduction to Statistics (3FWS)

Basic descriptive statistics, probability, hypothesis testing, correlation, and regression. Prerequisite: Mathematics 108, 110 or satisfactory performance on placement test.
216. Set Theory and Symbolic Logic (3F)

The first part of the course is devoted to naive set theory and includes the algebra of sets, relations, functions and orders. The second part is devoted to logic, including truth tables and first-order predicate calculus. Prerequisite: Mathematics 120 or satisfactory performance on placement test.
231, 232. Calculus III, IV (3F, 3W)
Partial differentiation, infinite series, multiple integrals, and differential equations. Prerequisite: Mathematics 132.
300. Modern Geometry (3W)

Fundamental concepts of geometry, including projective and non-euclidean geometries, with emphasis on the axiomatic method. Prerequisites: Mathematics 132 and 216 or consent of the instructor. Alternate years, offered 1986-87.
310. Multivariable Calculus (3S)

Vector analysis, vector calculus, differentiation and integration of functions of more than one variable. Prerequisite: Mathematics 232.
315. Mathematics for the Early and Middle Education Teacher (3S)

Content and methods designed to give the prospective teacher the basic mathematical understanding and skills needed for teaching grades K-8. Content topics include deductive reasoning, set theory, whole numbers, integers, operations and relations, numeration systems, rational numbers, elementary number theory. Mathematics laboratory experiences are included. Prerequisite: Mathematics 105,110 , or consent of the instructor and admission to the Teacher Education Program.
320. History of Mathematics (3I)

Survey of the history of mathematics from ancient civilizations to the modern

Mathematics
and
Computer
Science
(Cont.)

Mathematics and Computer Science (Cont.)
mathematics of the nineteenth century. Prerequisite: Mathematics 132. Alternate years; offered 1986-87.
325. Discrete Mathematics (3W)

Topics include enumeration, partitions, combinatorial concepts, generating functions, and graph theory. Prerequisite: Mathemathics 231 and Computer Science 250 .
330. Linear Algebra (3W)

Fundamentals of linear algebra, including vector spaces, matrix algebra, linear transformations, and bilinear and quadratic forms. Prerequisites: Mathematics 325 or Mathematics 216 and 231. Alternate years; offered 1985-86.
340. Mathematical Statistics (3S)

Fundamentals of mathematical statistics including probability, probability density functions, moment generating functions, estimation theory, and statistical inference. Prerequisite: Mathematics 231 or consent of instructor. Alternate years; offered 1986-87.
350. Numerical Analysis (3S)

Topics include iterative techniques for solving non-linear equations, numerical differentiation and integration, and differential equations. Prerequisites: Computer Science 110 and Mathematics 231. Alternate years; offered 1985-86.
400. Modern Algebra (3F)

Abstract algebra, with emphasis on algebraic structures such as groups, rings, integral domains, and fields. Prerequisites: Mathematics 216 and 232 or consent of instructor. Alternate years; offered 1985-86.
410, 420. Introduction to Real Variables (3F, 3W)
Real number system, topology of Euclidean Spaces, theory of limits, differentiation, integration, and infinite series. Prerequisites: Mathematics 216 and 232. Alternate years; offered 1986-87.
450. Special Topics (3S)

Devoted to a subject chosen from among the various fields of mathematics in which regular courses are not offered. Possible topics include complex variables, number theory, topology, probability, and applied mathematics, as well as others. A student is allowed to take the course more than once, provided different topics are covered. Prerequisite: Mathematics 232 or consent of the instructor. Offered in 1985-86.
460. Seminar in Mathematics, Computer Science, and Physics (2W)

Discussion and presentation of papers by students and faculty on problems of current interest in mathematics, computer science, and physics. Prerequisite: Senior standing with a major in Mathematics and Computer Science, or Physics, or consent of the instructor.

## COMPUTER SCIENCE

## 101. Introduction to Interactive Computing (1FWS)

Designed to acquaint the student with the structure of the PRIME Computer file system and the commands which are needed to use the computer efficiently. Included are commands utilized in the PRIME Operating System, the text editor, and the file utilities. Four hours lecture and laboratory per week for three weeks. This course is prerequisite to all other Computer Science courses and to using the college computer.
105. BASIC Programming (2FW)

Introduction of problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for 7 weeks. Prerequisite Computer Science 101.
110. FORTRAN Programming (2FW)

Introduction to problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for 7 weeks. Prerequisites: Computer Science 101 and Mathematics 120. Mathematics 120 may be a corequisite.
115. COBOL Programming (2S)

Introduction to problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for 7 weeks. Prerequisite: Computer Science 101.
250. PASCAL Programming (3F)

Continue the development of discipline in program design, in style and expression, in debugging and testing, especially for larger programs. Topics introduced are algorithmic analysis, string processing, recursion, internal search/sort methods, and simple data structures. Prerequisite: Computer Science 110.
320. File Processing (3W)

Provides the foundation for applications of data structures and file processing techniques. Topics include system specification, design and testing with emphasis on structuring data on bulk storage devices. Prerequisite: Computer Science 250. Alternate years; offered 1985-86.
340. Introduction to Computer Systems (3W)

Provides an introduction to computer systems and computer architecture. Topics include the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and fundamentals of logic design. A study is also made of the PRIME macro assembler. Prerequisite: Computer Science 250. Alternate years; offered 1986-87.
350. Introductory Data Analysis (3I)

Introduction to data analysis through the use of MINITAB statistical package. Also included will be an examination of methods of fitting functions to experimental data. Prerequisites: Computer Science 110 or 250, and Mathematics 132.
400. Introduction to Data Processing
(See Business 400.)
420. Data Structures (3S)

Introduction to commonly used computer data structuring techniques. Analysis and design techniques are applied to nonnumeric algorithms which act on data and design techniques are applied to nonnumeric algorithms which act on data
structures. Topics include graphs, stacks, queues, lists, trees, sorting, searching, and memory management. Prerequisite: Computer Science 250 and Mathematics 325. Alternate years; offered 1985-86.
440. Operating Systems (3S)

Introduction to the major concept areas of computer operating systems principles. Topics include memory management, process management, system struc-

Mathematics
and
Computer
Science
(Cont.)

Mathematics and Computer Science (Cont.)
ture, and evaluation and recovery procedures. Prerequisite: Computer Science 340. Alternate years; offered 1986-87.

A major in music consists of courses numbered 120, 121, 122, 220, 230, 241, 242, $243,300,311,312$ and twelve units in applied music. The requirement in applied music includes satisfactory completion of two years of keyboard instruction before graduation. The concentration also includes a requirement of performance in an ensemble for each year the student is in residence. In addition to the year-long ensembles for which credit is given, other ensemble opportunities are provided which meet this requirement.
Teacher certification requires voice training; courses $211,212,213,214,436,471$ and 481 for all prospective teachers; and, in addition, 330 and 422 for choralvoice teachers; 362 for keyboard specialization; and 320 and 423 for instrumental teachers. Also, all students wishing certification must complete the following: Education 300, 305, 310, and 365 or 366; Health and Physical Education 200 and a third activity course; History 201 or 202; and an additional hour in mathematics which may be met with Computer Science 101.
100. Voice Class (1W)

Development of the singing voice; posture, breathing, scales, vowels, consonants, placement, diction, pitch, intonation, intervals, vocal resonance; and choral and solo literature in several styles. Three hours per week.
120. Sight Singing (2F)

Tonal and rhythmic development through exercises in sight singing and ear training. Solfege, part singing, rhythms, scales, intervals and other fundamentals of music.
121, 122. Beginning Theory (2W, 2S)
Scales, intervals, and melody writing; primary and secondary chords; and fourpart writing. Dominant seventh chords and inversions; nonharmonic tones; elementary modulation (to the dominant and relative major keys); and keyboard harmony.
211. Brass Methods (1S)

Practical methods in the teaching, playing techniques, and care of brass instruments in the public schools. Three hours per week.
212. Woodwinds Methods (1W)

Practical methods in the teaching, playing techniques, and care of woodwind instruments in the public schools. Three hours per week.
213. String Methods (1F)

Practical methods in the teaching, playing techniques, and care of string instruments in the public school. Three hours per week.
214. Percussion Methods (1F)

Practical methods in the teaching, playing techniques, and care of percussion instruments in the public schools. Three hours per week.
220. Introduction to Western Music from 1500 to 1870 (3FS)

Listening and learning to recognize forms, styles, composers, and works in

Western music from 1500 to 1870.
230. Introduction to Twentieth-Century Music (3WI)

Listening and learning to recognize forms, styles, composers, and works in Western music since 1870.
235. Music of Sulb-Saharan Africa (3I)

A broad perspective of the musical cultures of Africa. The history of tropical music, the importance of music in tribal life, the musical instruments, the levels of music, musical professionalism, and the common musical denominators such as rhythm, tempo, polyphony, scale and melody, form, and style of performance are studied.
241. Intermediate Theory (2F)

Continuation of Music 122 with the addition of modulation to closely related keys, less common chord progressions, realization of a figured-bass line, diatonic seventh chords and borrowed chords.
242. Form and Analysis (2S)

Form and analysis of the large forms of master compositions.
243. Advanced Theory (2W)

Continuation of Music 242; altered and augmented sixth chords, other chromatic alterations, and twentieth century techniques.
272. The Evolution of Country Music (3I)

An examination of country music from its European origins to rural America, and from the beginning of its commercialism in the 1920's to the present. Time is devoted to the folkmusic of the British Isles and Appalachia, bluegrass music, and modern country music, and to the individuals who made significant contributions to each. One week is spent in Nashville, Tennessee, visiting museums, historical sites, and a recording studio.
300. Conducting (3W)

Choral and instrumental conducting. Elements of conducting, use of the baton, score reading, instrumental transpositions, the organization of choral and instrumental ensembles, and the application of conducting suitable materials for these organizations.
311. History of Medieval, Renaissance, and Baroque Music (3F)

Analytical study of the history of Western musical style from the codification of Gregorian Chant to 1750 . Listening and reading assignments focus on specific composers and works as they relate to historical trends in musical style.
312. History of Classic and Romantic Music (3W)

Analytical study of the history of Western musical style from 1750 to 1900. Listening and reading assignments focus on specific composers and works as they relate to historical trends in musical style.
316. History and Literature of the Organ (3I)

Historical survey of the eras and national schools of organ building and their influence on organ composition. Field trips to outstanding organs are included.
320. Instrumentation (2W)

Instruments of the orchestra and band as to their classification, range, fingering, tone-color, and general use. The course provides for writing and arranging of music for solo instruments, ensembles, band, and orchestra. Prerequisite: Music 243. Two two-hour sessions per week. Alternate years; offered 1985-86.
327. Marching Band Techniques (2F)

Rudiments used in marching bands and the study of a curriculum plan and the instructional procedures used in the presentation of a marching band show. Class meets three hours per week.
329. Keyboard Pedagogy (3IS)

Separate studies of piano and organ teaching regarding teacher qualifications, teaching techniques, graded music courses, professional ethics, recital planning, and teaching procedures in the use of the electronic piano laboratory.
330. Choral Arranging (2S)

A study in depth of the various choral styles, forms and voicings from the Renaissance to the twentieth century, and the practice of arranging in those styles. Two two-hour sessions per week. Alternate years; offered 1985-86.
340. Church Music (3F)

Church music, with work in the areas of history, hymnology, administration, graded choirs, choral techniques, choral literature, and worship. Alternate years; offered 1985-86.
361. Sixteenth-Century Counterpoint (2W)

Sixteenth-century contrapuntal techniques. Class meets three hours per week. Prerequisite: Music 243. Alternate_years; offered 1986-87.
362. Eighteenth-Century Counterpoint (2S)

Eighteenth-century contrapuntal techniques, including fugue. Class meets three times per week. Prerequisite: Music 243.
370. History of Dramatic Music (3WI)

Analytical study of the history of dramatic music, especially opera and oratorio. Listening and reading assignments focus on specific composers and works as they relate to historical trends in musical style. Class meets four hours per week. Alternate years; offered 1985-86.
400. Composition (2S)

The study and practice of musical composition, both traditional and modern.
Two two-hour sessions per week.
412. Music Education for the Classroom Teacher (3W)

Introduction to the melodic and harmonic instruments used in the elementary school. Selection and presentation of rote songs, activity songs, creative activities, rhythmic training, and listening program of grades K-6. For the non-music major.
422. Music Education in the Elementary School (3S)

Introduction to the melodic and harmonic instruments used in the elementary school. Selection and presentation of rote songs, rhythmic activities, creative activities, and listening program of grades K-6. Credit may not be received for both Music 412 and 422. Prerequisite: music major.
423. Band Organization and Administration (3S)

Designed to prepare students to develop methods of teaching and supervising instrumental music programs in the public schools. Alternate years; offered 1986-87.
436. Music Education in the Secondary School (2W)

The methodology and philosophy of teaching music in the secondary school. The role of performance and nonperformance classes and the supportive elements in a music education program. Class meets three hours per week.

471, 481. Supervised Teaching of Music (5F, 5F)
Supervised observation and teaching of music in elementary and secondary schools of nearby counties and cities. Two hundred hours of observation and teaching (minimum of one hundred twenty hours teaching) are required.

## ENSEMBLES

Ensemble members are chosen by audition and must attend a minimum of two rehearsals per week for the entire academic year to receive credit. Students engaging in interterm studies involving off-campus work are excused from ensemble participation while they are away. A maximum of four units of credit in ensemble participation may be applied toward graduation.
441. Concert Choir (One unit credit per year FWIS)

One may be a member of either the Oratorio Choir or the Concert Choir, but to receive credit, one must be a member of both. An oratorio is performed in the Winter Term and Concert Choir tours are made in the Spring Term.
442. Chorale (One unit credit per year FWIS)

A number of campus and off-campus appearances are made throughout the year. Participation in a music camp in September is required.
443. Symphonic Band (One unit credit per year FWIS)

Several concerts are given each year. Serious literature of both large and small dimensions is used.
444. Stage Band (One unit credit per year FWIS)

Playing contemporary arrangements as well as the revered "charts" of the big bands from the 1940s and 1950s. The band performs for many campus functions, and it tours in the Spring Term.

## APPLIED MUSIC

A student may register simultaneously for one or two applied music courses with the approval of his adviser and the music faculty. Two units credit are earned only through participation in applied music for the Fall, Winter, and Spring Terms of a single academic year. With the approval of the department, a student may simultaneously earn 4 units of credit in one applied music.
Piano 101 and 201 utilize the piano laboratory in Memorial Hall. The student attends two hours per week during Fall, Winter, and Spring terms. Piano 101 includes rudiments of music reading and keyboard technique leading to the playing of melodies with primary chords. Piano 201 develops basic keyboard techniques leading to secondary chords, 4-part hymn style harmony, accompaniment patterns and some basic keyboard repertoire.
For a new applied music student, the number of his course is determined by an audition before a member of the music faculty. The number designations of the applied music courses are as follows:
100 level. Beginning student.
200 level. Second year for beginning student.
Prerequisite: 100 level in same area or consent of the music faculty. 300 level. First year for advanced students.

Prerequisite: Consent of the music faculty.

Music (Cont.)

Philosophy
and
Religion

350 level. Second year for advanced students. Prerequisite: 300 level in same area.
400 level. Third year for advanced students.
Prerequisite: 350 level in same area.
450 level. Fourth year for advanced students.
Prerequisite: 400 level in same area.
The unit digit in applied music course numbers designates the specific applied music. For example:
101 Beginning piano
102 Beginning organ
103 Beginning voice
104 Beginning woodwind instruments
105 Beginning brass instruments
106 Beginning percussion instruments

A major in Philosophy and Religion consists of not less than 30 units with a minimum of 12 units each from Philosophy and Religion, the remaining units composed of courses approved by the department.
English 120 is prerequisite to all courses in Philosophy and Religion.
Religion 200, 210, or 220 is prerequisite to all other courses in Religion.

## PHILOSOPHY

200. Introduction to Philosophy (3FS)

Philosophical inquiry into selected problems facing our age and our selfunderstanding. Topics include the new morality, knowing what is true, technological and scientific interests, and religious understandings. Prerequisite: Sophomore classification or permission of the instructor.
205. Contemporary Moral and Political Problems (3I)

Examination of pressing moral and philosophical questions which have become major political issues of our day. Problems considered include abortion, sexism, racism, drugs, privacy and censorship, civil disobedience, and others of interest to the group.
210. Logic (3W)

Examination of the logic of everyday thought. Common fallacies and valid reasoning in the argumentative process. A brief introduction to symbolic logic is included. Alternate years; offered 1986-87.
304. Philosophy of Science (3S)

Interaction of philosophy and science which affects man's understanding of the physical universe, life, the mind, and human values. Investigations are made into methods of research, physical evidence defining our universe, the principle of relativity, the uncertainty principle, predictive knowledge, and related topics.
311. The Classical Mind (3F)

A careful examination of some of the primary works of Plato and Aristotle. The development of certain issues into the Medieval era is traced and the original contributions of major Medieval thinkers, especially Augustine and Aquinas, are assessed. Alternate years; offered 1985-86.
312. The Evolution of the Modern Mind (3W)

The primary works of certain major philosophers who have shaped our intellectual history. Emphasis is placed on Descartes, Spinoza, Leibnitz, Hume, Locke, Kant, and Hegel. The basic philosophical turning-points in the modern history of our civilization are highlighted. Alternate years; offered 1985-86.
313. Contemporary Philosophy (3S)

Examination of the outstanding philosophical concerns of our milieu through the primary works of certain influential thinkers and schools of thought. Included are analytical philosophy, language analysis, existentialism, and process philosophy. Alternate years; offered 1985-86.
320. Business and Professional Ethics (3S)

A survey of the pressing issues confronting professionals in a technological era. Utilizing the insights of philosophical and religious ethics, the course examines the responsibilities of the professional person in business, rnedicine, law, education, the ministry, and other fields. Problems considered include client confidentiality, accountability, peer review, and governmental regulation. Prerequisite: Junior or Senior standing.
420. Existentialism (3W)

Contemporary literary, philosophical, and theological existentialist writers. Primary authors included Kierkegaard, Camus, Sartre, and Heidegger. Alternate years; offered 1986-87.
430. Philosophy Seminar (3W) Intensive study, research, and discussion in an interdepartmental field of current interest. The Departments of Psychology, Sociology, Economics, History, and others cooperate at times with the Department of Philosophy and Religion in presenting this seminar.

## RELIGION

200. Biblical Studies (3F)

The content of the biblical materials, the revolution in biblical studies, and the resources available for further use and study of the Bible. Various interpretations of the materials are explored. Credit may not be received for both Religion 200 and 210.
210. Old Testament (3FWS)

History, literature, and faith of the Hebrew people in the Old Testament period. The Old Testament literature is examined utlizing the insights of archeology and literary and historical criticism. The impact of Hebrew history upon Western culture and the contemporary relevance of Hebrew theological insights are considered. Credit may not be received for both Religion 200 and 210.
220. New Testament (3WS)

Christian beginnings with emphasis upon the literature and thought of the early Christian community.
240. Christian Perspectives on World Peace (3I)

A seminar approach to Biblical, historical, and social attitudes toward war including a study of the current political, scientific and social factors which affect world peace. The feasibility and effectiveness of programs which work at alternatives to war, such as conflict resolution, will be examined.

Philosophy and Religion (Cont.)
300. Basic Christian Beliefs (3S)

An introductory course in Christian theology. The central doctrines of the Christian faith are examined and various interpretations of those doctrines are evaluated. The course is taught in a seminar format.
310. Jesus of History (3W)

Study of the Gospels, with concentration on the Synoptics: Matthew, Mark, and Luke. The teachings and life of Jesus and the world in which he lived are examined in light of the tools and findings of recent scholarship. Alternate years; offered 1985-86.
312. Archeology and the Bible (3I)

Archeology as it related to biblical materials, especially in the Old Testament. An examination of findings and discoveries of the past two centuries and their relationship to biblical religion and faith, and to the history of the Hebrew people.
320. Religion In Life (3FS)

Readings in, and discussion of, the nature and dimension of the religious life for contemporary man. Includes examination of the nature and language of religion, the problem of evil, suffering, secularization, doubt, disbelief, dimensions of decision-making, commitment, and criteria for a mature faith.
330. Contemporary Religious Thought (3F)

Critical reading and discussion of writings of representative contemporary theologians and writers in the field of religion with a view to developing an awareness of basic issues and patterns in present theological thinking. Alternate years; offered 1986-87.
340. Religions of the Near East (3W)

An encounter with the major living religions of the Near East stressing a sympathetic understanding of the illumination which is provided the adherents of each for daily living, as well as some of the cultural expressions of each in those societies where they flourish. Religions studied include Judaism, Islam, Zoroastrianism, and African religion.
350. Religions of the Far East (3W)

An encounter with the major living religions of the Far East stressing a sympathetic understanding of the illumination which is provided the adherents of each for daily living, as well as some of the cultural expressions of each in those societies where they flourish. Religions studied include Hinduism, Buddhism, Chinese religion, and Shinto.
420. Christian Ethics (3S)

Personal and social ethical issues from the perspective of contemporary writings of Christian ethicists. Normative and contextual approaches. An examination of the relationship between religion and culture.
425. History of the Church of the Brethren (3I)

From its beginning to the present day. An emphasis is placed upon understanding the church today in light of its historical development, and attention is paid to Brethren doctrine and ideals. Field experiences include visits to significant sites in Pennsylvania, Maryland, and Virginia.
430. Church History (3F)

Social and political structures of the Church, issues in theology and ethics. A survey of the history of the Church from the Apostolic Age to the present time. Alternate years; offered 1985-86.

## PHYSICS

A major in Physics consists of courses numbered 221, 222, 305, 311, 331, 340, 345, and 460 , and 6 additional units from courses numbered 300 or above. Supporting courses for a major in physics consist of Mathematics 120, 131, 132, 231, and 232.
A combination major in Physics and Mathematics consists of 27 units in Mathematics and 21 units in Physics above 200 including Physics 345 and 460. This major is designed primarily for students wishing to certify to teach physics and mathematics at the secondary level and cannot be taken as a dual major with a major in mathematics or a major in physics.
A major in Physical Science consists of Chemistry 121, 122; Mathematics 120, 131, 132, 231, 232; Physics 221, 222, 340, 460; and six additional courses numbered 300 or above chosen from the Departments of Chemistry and Physics. This major is designed primarily for pre-engineering students and cannot be taken as a dual major with a major in chemistry or a major in physics.
110. Introductory Astronomy (4WS)

Designed to help the student appreciate and understand his physical environment and the methods of physical science through the study of basic astronomy. Topics include motions of celestial bodies; stellar masses, sizes, and distances; stellar structures and evolution; galaxies, and cosmology. Four lectures and one recitation or laboratory per week.
210. Wave Motion (3I)

Mechanical, acoustical, optical, and electrical wave motion are demonstrated, and the application to structures, music, vision, radio, and astronomy are presented. Students will devote full days to working in the laboratory. The course concludes with consideration of wave-particle dualism. Prerequisite: Math 110.
221, 222. General Physics (4W, 4S)
First term: mechanics, properties of matter, heat, and sound. Second term: light, electricity, magnetism, and modern physics. Prerequisite: Mathematics 130 or 131 or concurrent enrollment in Mathematics 131. Four hours lecture and three hours laboratory per week.
305. Analog Electronics (4F)
D.C. and A.C. circuits, diodes, transistors, amplifiers, power supplies, operational amplifiers, high-frequency techniques. Prerequsite: Physics 222. Three hours lecture and six hours laboratory per week. Alternate years; offered 1985-86.
306. Digital and Microprocessor Electronics (4F)

Logic gates, flip-flops, counters, registers, readouts, digital-to-analog converters, analog-to-digital converters, microprocessors, microcomputers. Prerequsite: Physics 222. Three hours lecture and six hours laboratory per week. Alternate years; offered 1986-87.
311. Mechanics I (3F)

Statics, simple harmonic motion, central force motion, Kepler's laws, changing mass, and center of mass coordinates. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1986-87.
312. Mechanics III (3W)

Fixed axis motion, rotating coordinates, coupled oscillations, and Lagrangian mechanics. Prerequisite: Physics 311. Alternate years; offered 1986-87. up to Maxwell's equations. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1986-87.
332. Electromagnetic Theory (3S)

Maxwell's equations, electromagnetic waves, dielectric properties, radiation, wave guides, and relativistic electrodynamics. Prerequisite: Physics 331. Alternate years; offered 1986-87.
340. Modern Physics (3W)

Relativity, wave-particle dualism, Schroedinger equation, wave functions, spectra, nuclear physics and elementary particles. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1985-86.
345, 346. Experimental Physics (3W, 3W)
Consists of certain classical and modern experiments designed to give the student a basic understanding of experimental methods. One hour lecture and eight hours laboratory per week. Prerequisites: Physics 221, 222, and Mathematics 132.
420. Quantum Mechanics (3S)

Schroedinger equation, square well, harmonic oscillator, hydrogen, atom, matrix methods, angular momentum, spin, and approximation methods. Prerequisites: Physics 340 and Mathematics 232. Alternate years; offered 1985-86.
450. Special Topics (3F)

Thermal, magnetic, conduction, and other properties of solids as predicted by the crystal structure of materials. Prerequisite: Permission of instructor. Offered 1985-86.
460. Seminar in Mathematics, Computer Science, and Physics (2W) (See Mathematics 460.)

A major in Psychology consists of 30 units in Psychology courses including Psychology 200. Mathematics 200 is also required.
Psychology 200 is prerequisite to all other courses in the department.
200. Contemporary Psychology (3FWS)

The main streams of thought and basic data in contemporary psychology. Emphasis is given to the understanding of individual and social behavioral phenomena experienced by the student in terms of basic learning and development. Laboratory experience is given in systematic observation and manipulation of critical behavioral variables.
220. Abnormal Psychology (3)

Symptoms, dynamics, treatment, and prognosis of the various forms of behavior pathology. Offered on demand.
300. General Experimental Tactics (3F) Laboratory methods of investigating human behavior with emphasis upon instrumental control, response quantification, utilization of digital logic equipment and the PRIME 750 computer. Laboratory work encourages individual initiative and creative approaches to behavioral problems.
310. Group Research Methods (3W)

Experimental control through complex group research designs. Laboratory work utilizes groups of human subjects with K -sample, factorial, and least square designs. Special emphasis is given to appropriate analysis and interpretation of experimental data. The PRIME 750 computer is utilized in statistical analyses.
320. Individual Research Methods (3S)

Research problems requiring extensive data gained from a small number of subjects. Experiments involve sensory and perceptual thresholds and steadystate performance utilizing normal and psychotic human subjects and animals. Experience is gained in on-line, real-time computer use in behavior research with emphasis placed on validity and reliability of experimental data.
340. Modification of Behavior (3I)

Basic concepts within respondent and operant learning relating to the development, maintenance, and change of human behavior. Particular attention is given to behavioral development in educational settings and behavior modification in mental health settings.
345. Behavioral Technology (3 Summer)

A study of behavior recording procedures, record keeping, charting, and graphing. Emphasis is given to the utilization of graphic data in planning, evaluating and redesigning behavioral programs. Consideration is given to contracting, contingency management, and precision teaching. Prerequisite: Psychology 340.
350. Assessment of Behavior (3W)

Theory and practice of observing and assessing the behavior of an individual. Special emphasis is given to the use of observational data in the development of predictive statements concerning behavior. Several standardized individual tests are included.
410. Psychophysiological Methods (3F)

Psychophysiological methods and approaches to the physiological basis of behavior. Special attention is given to motivation and arousal, learning and memory. Laboratory experience is gained in bioelectric recording, intercranial stimulation, gastric fistuli, surgical procedures with animals, and instrumental behavioral evaluation techniques.
415. Marine Animal Behavior (3I)

The behavior of marine vertebrates and invertebrates in controlled aquarium experiments and underwater field study on tropical reefs. The first week is spent on the Bridgewater campus in intensive study of behavioral processes in marine animals. The last two weeks are spent collecting data in the Bahamas. Prerequisite: Psychology 200 and scuba certification.
420. Behavior Problems (3W)

Physiological psychology with special emphasis upon current techniques for evaluating behavioral phenomena resulting from surgical intervention, pharmacological agents and chronic indwelling cranial electrodes. Laboratory work utilizes instrumental reward training, avoidance training, discrimination training, and threshold determination with rats, pigeons, and cats.
440. Social Behavior (3S)

Experimental analysis of interpersonal behavior, with particular emphasis on small group processes.
450. Philosophy of Behavioral Science (3F)

The philosophical issues which have guided the development of behavioral science. Specific attention is given to the historical development of such issues as mind-body, measurement and operationism, reality and knowledge, inductive and deductive thinking, levels of explanation, and theoretical constructs.
460. Seminar in Contemporary Psychology (3S)

Issues, problems, and concerns in contemporary American psychology.
470. Special Topics (3)

Devoted to a subject chosen from among the various fields of psychology. Possible topics include Psychological Development Perception, Motivation, Emotion, Consciousness, and Personality, as well as others in which regular courses are not offered. A student is allowed to take the course more than once provided different topics are covered. Prerequisite: Permission of instructor. Offered on demand.

## 481. Practicum in Behavior Modification (3 Summer)

Supervised practicum experience in behavior modification in clinical and educational settings. Prerequisite: Psychology 345.

A major in Sociology consists of 21 units in Sociology including 200, 340, 350, 420,450 , and 12 units in supporting fields including Mathematics 200.
Sociology 200 is a prerequisite to all other courses in the department except Sociology 260 and 300.
200. Principles of Sociology (3FIS)

Study of man as a social being and the significance of the group concept in better understanding human behavior; how sociological knowledge is accumulated and systematized through theory and social research. Consideration is given culture, socialization, personality, social stratification, social institutions and associations, community, collective behavior, population and ecology, urbanization, industrialization, social change, and social disorganization.
260. Courtship, Engagement, and Marriage (3S)

Impact of biological, economic, psychological, religious, and sociological factors before and after marriage. Included are topics such as courtship, choice of a mate, engagement, roles, communication, sexuality, sex education, adjustment after marriage, and some basic principles in child rearing.
300. General Anthropology (3F)

Examination of man's biology and evolution as seen through genetics, races, archaeology, and prehistory; and the diversity and uniformity of man's behavior as seen through cross cultural studies. The growth and spread of culture in time and space are reviewed; the impact of urbanization, industrialization and technological trends on the nature and quality of man's life are examined.
305. Ancient and Modern Cultures of Mexico (3I)

Background reading on Mexican archaeology and prehistoric cultures of the Olmec, Mayan, Teotihuacan, Toltec and Aztec civilizations is combined with a two-week tour of famous archaeological sites in and around Mexico City. Contemporary urban and rural life are studied by means of observation in Mexico City and visits to several Mexican towns, native markets, the University, major museums, and bullfights. Alternate years; offered 1986-87.
310. Criminology (3F)

Crime as a social phenomenon with particular attention to causes and treatment of crime.
326. Social Problems (3I)

Problems of population growth, environment, and resource depletion, alcoholism and drug addiction, crime and violence, inequality and poverty, unemployment, alienation and several others will be studied. Development of public awareness, role of social movements, theoretical approaches, value conflicts, interest groups and power struggles, and examination of proposed solutions will also be included. Alternate years; offered 1985-86.
330. Minority Group Relations (3F)

Presentation of results of investigation by anthropologists, economists, historians, social psychologists, and sociologists. Included are race; fact and myth; sources of prejudice and discrimination; intergroup relations within America in terms of conflict, segregation, stratification, and assimilation; minority reactions to dominance; and techniques for bringing about change.
340. The Community (3W)

Exploration of variables important to an understanding of the structure and function of urban and rural communities. These variables include demography, social ecology, value systems, social stratification, leadership, economics, politics, and organizational structure. Emphasis is placed on the urban community including such concerns as urban decay, housing, crime, pollution, transportation, poverty, minority problems, and urban renewal programs.
350. Elementary Research Methods (3S)

Contributions of theory to research, of research to theory, and of both to the systematic accumulation of reliable knowledge. Included are how to select a general topic and a specific research problem, development and testing of hypotheses, collection of data, sampling, coding and storing, and a limited number of statistical measures used in the analysis of data. Prerequisite: Mathematics 200 or permission of instructor.
410. Sociology of the Family (3W)

Examination of the human family historically in several ancient societies and comparatively in various contemporary cultures with major emphasis placed upon the modern American family. Included are such topics as the family and personality, emotional interaction in the family context, expectations and roles, child rearing, family life cycles, family conflicts and accommodations, family crises, and the family in transition.
420. Social Stratification (3S)

Patterns of social stratification and important theories of the class structure. Stress is placed upon analysis of the American class system; acquaintance with major research in the field is emphasized. Prerequisite: Sociology 350 or permission of instructor.
430. Culture of India (3W)

Survey of the racial, social, and cultural history of India in ancient and modern times. Attention is given to the impact of industrialization and urbanization upon Indian culture, and to the interrelation of Western and Indian values and institutions. Contemporary political and socio-economic trends and problems are examined. Prerequisite: Sociology 300 or permission of instructor. Alternate years; offered 1985-86.
440. Cultures of Africa (3W)

Survey of the racial, social, and cultural history of Africa in ancient and modern times. Attention is given to the impact of urbanization and to African responses to Western values and institutions as carried to the continent by the colonial powers. Contemporary political and socio-economic trends and problems. Prerequisite: Sociology 300 or permission of instructor. Alternate years; offered 1986-87.
450. Sociological Theory (3W)

The relation between theory and research with contemporary theoretical and research developments. Theory is treated as empirically based statements which explain the relationships among complex social variables. Prerequisite: Sociology 420.

## RELATED COURSES: SOCIAL WORK

460. Introduction to Social Welfare (3F)

Traces the origins and development of current social welfare institutions and points up the philosophical and ethical considerations undergirding social welfare. The student is introduced to the various settings in which social work is practiced, the different roles played by the social workers, the values and activities of social work as a profession, and the methods employed by the social worker in providing services.
465. Counseling and Personal Development (3W)

Basic counseling skills course designed for students who plan to enter a helping profession. Helping skills such as attending, reflecting, clarifying, emphathizing, supporting, examining feedback, confronting, and facilitating group process are treated. Goal setting, decision making, self-awareness and referral techniques are also included. Prerequisite: Sociology 460 or consent of instructor.
470. Interventive Methods in Social Work (3W)

Designed to prepare students for general problem solving activity in various social welfare settings. Orientation is given to methods employed in casework, group work, and community organization. Insights are developed whereby the student may relate observed behavior to psychological and socio-cultural factors affecting the individual. Prerequisite: Sociology 460 or permission of instructor.
481. Field Experience in Social Welfare (3 or 10 FWIS)

Provides social work experience through placement in a social welfare agency. The placement may be arranged for a full-time experience during a ten-week term or the three-week Interterm or on a part-time basis during a ten-week term. The experience is under careful supervision of both the agency and the sociology department. The student's interest influences the choice of an agency whenever possible. Approximately 120 hours of participation are required for three units of credit and 400 hours are required for 10 units. A maximum of 13 units of credit may be applied toward the 123 units required for graduation. Prerequisites: Sociology 200, 460, and 470.

## TELECOURSES

The courses such as the selected list below are offered via television broadcast by WVPT-TV, Harrisonburg, Virginia, in cooperation with the national Public Broadcasting Service. The typical course is presented in thirty half-hour televised lectures over a period of fifteen weeks and bears three semester units of credit. An orientation seminar, a midterm seminar, and appropriate examination sessions are administered on the Bridgewater College campus. Standard evaluation and grading practices are followed.

## Political Science 434: The Constitution: That Delicate Balance

An introductory-level political science course on constitutional rights and public policy. Thirteen one-hour televised seminars on controversial issues feature dramatic confrontations between a skilled moderator and a distinguished group of experts, including Gerald Ford, Ed Muskie, Potter Stewart, Gloria Steinem, and Dan Rather. Topics in this prime-time series include: The Electoral Process, School Prayer, Gun Control, The Right to Assemble, The Right to Live, The Right to Die, Punishment and the Death Penalty, and Affirmative Action versus Reverse Discrimination.

## Business 425: The Business of Management

A lively exploration of the concepts of management and business, with emphasis on successful career development. This course is designed to enhance managerial techniques in organization, planning, decision-making, motivation, and communication. Included in the 26-program series are discussions of Managing Organizational Conflict, Staffing and the Personnel Function, Managerial Stress, Influence, Power, and Authority, and Financial Methods of Control.

## Religion 314: Heritage: Civilization and the Jews

A survey of Jewish history, thought, and culture against the backdrop of the civilizations in which Jews have lived. The 5000-year story of the Jewish people from the Biblical era through the present, hosted by Abba Eban, former Israeli Ambassador to the United Nations and to the United States. Among the 9 one-hour prime-time telecasts are: A People is Born-Origins of the Ancient Israelites, Rabbinic Judaism and the Rise of Christianity and Islam, Out of the Ashes-The Destruction of European Jewry and its Aftermath, and The Living Legacy-World Jewry Today.

## Computer Science 104: The New Literacy

An up-to-date survey of electronic data processing, computer hardware and software systems, and developments that will determine further advancements in information processing. Opportunities available for hands-on experience with the Bridgewater College PRIME 750 computer. Titles in the 26 half-hour program series include: Communicating with a Computer, From Micros to Monsters, System Analysis and Design, Office Automation, Computer Files and Databases, Computer Security, and Issues and Trends in Computing.

## Psychology 210: Brain, Mind, and Behavior

An introductory-level course designed to give students a comprehensive understanding of the human brain, its functions, its common pathologies, and its many mysteries. The prime-time series features people whose brains malfunction or work exceptionally well, who suffer from memory loss, Parkinson's disease, or depression, or whose lives have been dramatically improved by advances in science. Included in the 8 one-hour programs are: The Enlightened Machine, The Animal Brain, Learning and Memory, Schizophrenia, and The Brain Age.

$\boldsymbol{R}$ egistration. Students are expected to register promptly in the period devoted to registration at the beginning of each term. Failure to register at the proper time will result in the assessmesnt of a late registration fee. The College accepts no responsibility for holding room reservations or providing living accommodations for students who fail to register on the days designated for that purpose.

By permission of the Dean for Academic Affairs, one may make adjustments in his or her program of studies during the first week of classes. While a new course may not be entered, one may be cancelled after that time, provided permission is obtained. In this event, a grade of WP, WF, or U will be shown on the permanent record.

Class Attendance. Regular class attendance is expected of all students and attendance records are kept. Responsibility for protecting the academic interests of the student and the College rests with the student and the instructor. A student who persists in being absent from class will be reported to the Dean for Academic Affairs with whom the student must have a conference. At the discretion of the instructor and the Dean for Academic Affairs, the student may be withdrawn from the course with a WF grade and may possibly be withdrawn from the College.

Excuses for unavoidable absences must be reported to the instructor at the first meeting following the absence. Absences which occur because of college activities approved by the Dean for Academic Affairs will be reported in advance to the Dean for Academic Affairs by the instructor sponsoring the activity, and the Dean will notify the instructors of the excused absences involved.

Classification of Students. A student who has earned 25 units or less is classified a freshman; 26 to 59 units, a sophomore; 60 to 89 units, a junior; and 90 units or more, a senior. A student who is permitted to carry less than six units in a ten-week term is classified as a part-time student.

The classification of each student is determined at the beginning of a session, and it does not change throughout the academic year. An exception to this procedure is made in the case of students who achieve senior status within the year and plan to graduate by the end of the following summer session.

The Unit of Credit. The basis of credit is called a unit. A unit of credit is equivalent to one semester hour. A three-unit course meets four 60 -minute periods per week for ten weeks. Two hours preparation are expected for each hour of lecture or recitation. A two-hour or three-hour laboratory or studio per week for a term receives one unit of credit.

In continuing education programs, Bridgewater College records one continuing education unit for ten hours of participation. Continuing education units are not applicable toward a degree.

Quality Point Average. Quality points are applied to work taken at Bridgewater College as follows: For each unit of credit with a grade of A, four quality points are assigned; with a grade of B , three quality points are assigned; with a grade of C , two quality points are assigned; and with a grade of D , one quality point is assigned. Grades of WP, WF, F, S, and $U$ receive no quality points.

The quality point average is computed by dividing the quality points achieved by the units of credit attempted at Bridgewater College. All units for which a student enrolls are counted as units attempted except those units for which a grade of WP or S is received. However, a student may repeat course work in which he or she has received a grade of $\mathrm{D}, \mathrm{F}$, or WF, and, in the case of repeated work, the highest grade is used in computing the student's quality point average.

ACADEMIC AND DEGREE INFORMATION
Academic Regulations

Academic Regulations (Cont.)

Work accepted for transfer to Bridgewater College counts as units earned. Units attempted and quality points achieved are not transferred. Hence, a student's quality point average, both cumulative and in the student's major concentration, is only dependent upon work attempted at Bridgewater.

The Grading System. A grade is assigned at mid-term and at the end of the term on each subject for which one is officially registered. Only the grades assigned at the end of the term are recorded on the permanent record. One of the following grades is issued for each course attempted on the campus: A, B, C, D, F, I, WP, or WF. For student teaching, grades of S or U are assigned. Courses carrying grades of S or U do not contribute to units attempted or quality points achieved nor do they figure in the quality point average, but appropriate units earned are credited to the student's permanent record. Each grade is interpreted as indicated below:

A-superior achievement.
B-above average achievement.
C-average achievement.
D-fair or below average achievement.
I-incomplete achievement. This grade may be given when the student has been unable to complete the course or has failed the final examination because of illness or emergency situation which is beyond control. The time and conditions for the removal of an I must be approved by the Dean for Academic Affairs when it is assigned.
WP-Withdrawn Passing. This grade indicates that the student's achievement in the course was satisfactory at the date of withdrawal. In order to receive it, the withdrawal must have the approval of the teacher of the course and the Dean for Academic Affairs before the end of the sixth week of a ten-week term, the second week of the Interterm, or the fifth week of the summer session; or permission to withdraw from college. In determining the grade point average, units with a grade of WP are not counted as units attempted.
WF-Withdrawn Failing. This grade indicates that the student's achievement in the course was unsatisfactory at the date of withdrawal. In determining the quality point average, units with a WF grade are counted as units attempted. This grade is not given during the first three weeks of a ten-week term.
F -unsatisfactory achievement. A grade of F carries no credit. Once this grade is assigned it will remain on the permanent record; however, the course may be repeated for credit.
S—satisfactory achievement.
U -unsatisfactory achievement. A grade of U carries no credit.

Grade Reports. Grade reports are made twice each ten-week term to students and to their parents. Parents are furnished special reports at other times upon request.

Minimum Scholarship Standards. Every student who is permitted to enroll at Bridgewater College is expected to make continuous progress toward his or her
educational objective. At the end of each ten-week term a careful evaluation of the achievement of each student is made, and a student whose quality of performance is below the minimum scholarship standards as outlined below will either be placed on academic probation or suspended. The Council on Education is responsible for interpreting these standards and for hearing appeals concerning them.

A student who does not achieve a term quality point average or a cumulative quality point average equal to or greater than the standard appropriate to the student's classification will be placed on academic probation. A freshman must earn a quality point average of 1.60 ; sophomore, 1.70; junior, 1.80; and senior, 1.90 .

While on academic probation, counseling by the Deans and his or her faculty advisor may result in curtailment of co-curricular activities. The academic probation status is recorded on the student's grade report, permanent record, and transcript of credits.

At the end of the academic year a student will be suspended if the student's cumulative quality average is less than the value listed below corresponding to the number of total units enrolled by the student prior to the start of the academic year. "Total units enrolled" is a term used only for the purpose of determining the suspension standard which applies to a particular student. It is the sum of all units for which the student received grades (including withdrawal grades and repeated courses) and units accepted for transfer from other colleges and universities.

| Total Units Enrolled | Minimum Cumulative Quality Point Average |
| :---: | :---: |
| 25 or fewer | 1.40 |
| $26-59$ | 1.60 |
| $60-89$ | 1.80 |
| 90 or more | 1.90 |

Total Units Enrolled $\quad$ Minimum Cumulative Quality Point Average
25 or fewer
$26-59$
$60-89$
90 or more

With permission of the Dean for Academic Affairs, a student may attend summer
session to attempt to raise his or her quality point average above the minimum required
for continued attendance.
Total Units Enrolled $\quad$ Minimum Cumulative Quality Point Average
25 or fewer
$26-59$
$60-89$
90 or more

With permission of the Dean for Academic Affairs, a student may attend summer
session to attempt to raise his or her quality point average above the minimum required
for continued attendance.
Total Units Enrolled $\quad$ Minimum Cumulative Quality Point Average
25 or fewer
$26-59$
$60-89$
90 or more

With permission of the Dean for Academic Affairs, a student may attend summer
Session to attempt to raise his or her quality point average above the minimum required
for continued attendance.
Following academic suspension, one is ineligible for readmission until one academic year has elapsed. Also, a student who withdraws from college at a time when his or her cumulative quality point average is below the standard required for continued
attendance is ineligible for readmission for one year from the date of withdrawal. To be or her cumulative quality point average is below the standard required for continued
attendance is ineligible for readmission for one year from the date of withdrawal. To be readmitted, a student must present evidence sufficient to convince the Committee on Admissions that he or she can meet the minimum scholarship standards. Failure to
meet this standard of performance in one academic year will normally result in Admissions that he or she can meet the minimum scholarship standards. Failure to
meet this standard of performance in one academic year will normally result in dismissal.

Overload Policy. Students are permitted to enroll in a maximum of 11 units without paying an overload fee. Normally only students on the Dean's List may apply to the Dean for Academic Affairs for permission to enroll in an overload (more than 11 units of credit including courses audited). Students who are permitted to enroll for an units of credit including courses audited). Students who are permitted to enroll for an
overload must pay the overload fee. An exemption to the assessment of the overload fee is made in the case of a student who enrolls in three four-unit courses for a total of 12 units. Also, the overload fee is not assessed when applied music lessons cause the student to be registered for an overload.

Academic Regulations (Cont.)

## Degree <br> Requirements



The curriculum of a liberal arts college, considered in the broadest sense, is a course of study planned and organized for the purpose of leading a student to a definite educational objective. The curriculum, however, is only one of several vital parts of a higher education; the other important constituents are the student, the teacher, the library, the student body, the co-curricular program, and the physical and intellectual environment. The good liberal arts college so organizes these vital elements of a higher education that they interact and give the student as much of a liberal education as he or she is capable of acquiring.

The curriculum at Bridgewater is divided into three parts, with each part having its own requirements and objectives. The first part is composed of General Education Courses. A few of these courses are required, but in most areas the student has options. The requirements in general education have been patterned to insure the student an understanding of persons and their cultural, social, and natural environment and a development of proficiencies, techniques, and understandings to enable one to successfully pursue higher educational goals and life in a highly developed economic and social order.

The second part of the curriculum forms the Field of Concentration, or the departmental major. Its purpose is to add depth in one field to the breadth of knowledge the student gained in the General Education Courses. It enables the student to work effectively in a major field after graduation or prepares one adequately for graduate or professional study.

Elective courses form the third part of the curriculum. A student is encouraged to elect courses which will increase skills and understandings in a major field, which will fall in fields in which the student has an avocational interest, and which will adequately meet professional and graduate school requirements. The Dean for Academic Affairs, the student's faculty advisor and the department chairman of the student's major field can help the student choose appropriate electives.

## SPECIFIC REQUIREMENTS

1. A minimum of 123 units of credit must be earned. Forty-eight units must be chosen from junior-senior level courses.
2. A quality point average of 2.00 must be earned on all work attempted.
3. A minimum of thirty units and twenty-seven of the last thirty units of academic work must be earned in residence at Bridgewater College. In addition, at least nine units of the concentration must be completed at Bridgewater.

## REQUIREMENTS IN GENERAL EDUCATION

## Development of Western Culture <br> Six Courses

The six courses which meet the requirement in Development of Western Culture must be chosen from the courses listed below and from appropriate Interterm studies so that a minimum of one course is selected from each of the following:

English 201, 202, or 203
History 101, 102, or 103
Religion 200, 210, or 220
An additional course in Philosophy or Religion from the list below.
In addition, these six courses are chosen to include at least two courses from the Ancient and Medieval Period, one course from the Renaissance and Early Modern Period, and one course from the Contemporary Period. Those marked with an asterisk are especially recommended.

[^0]Degree
Requirements (Cont.)

## Degree <br> Requirements (Cont.)

Spanish 420: Medieval and Golden Age Literature and Life Spanish 431: Spanish-American Literature and Life

Contemporary Period
Drama 320: Modern Drama
Education 310: Foundations of Education
*English 203: Western Thought in Literature: The Modern World
English 371: Nineteenth-Century English Literature
English 402: American Literature after 1880
English 420: The Novel
French 420: Literature and Life of the Nineteenth Century
French 430: Literature and Thought of the Twentieth Century
*History 103: Western Civilization since 1815
History 202: United States Civilization
History 301: Modern Europe Prior to 1870
History 302: Europe Since 1870
Music 230: Twentieth-Century Music
Music 312: History of Classical and Romantic Music
*Philosophy 200: Introduction to Philosophy
Philosophy 313: Contemporary Philosophy
Religion 300: Basic Christian Beliefs
Religion 320: Religion In Life
Religion 420: Christian Ethics
Spanish 440: Literature and Life of the Nineteenth Century Spanish 450: Literature and Thought of the Twentieth Century

Courses which are not applicable to a single historical period but may be applied to the requirements in Development of Western Culture are:

> Art 345: The Visual Arts
> Drama 300: Highlights in Theatre History
> English 430: Tragedy: Studies in Tragic Vision
> Religion 430: Church History

## World Cultures

Two Courses
History 400: History of Russia
History 410: Latin America
History 420: East Asia
History 430: Southeast Asia
Religion 340: Religions of the Near East
Religion 350: Religions of the Far East
Sociology 300: General Anthropology
Sociology 430: Culture of India
Sociology 440: Cultures of Africa

The Individual and Society Three Courses Of the three courses required in this area, one course must be chosen from three of the following disciplines:

Economics 200: Principles of Macroeconomics Political Science: (Any course)
Psychology 200: Contemporary Psychology
(Education 300 may be substituted for Psychology 200 by students admitted to the teacher education program.)
Sociology 200: Principles of Sociology
The Natural Environment
Two Courses Of the two courses required in this area, one must be chosen from biological science and one from physical science.

Biological Science:
Biology 100: The Nature of the Biological World
Biology 201: Introductory Biology—Life at the Subcellular and Cellular Level

Physical Science:
Chemistry 102: The Earth and Its Physical Resources
Chemistry 103: Fundamentals of Chemistry
Chemistry 120: Concepts in Physical Science
Chemistry 121: General Chemistry
Physics 110: Introductory Astronomy
Physics 221: General Physics


## English Composition

## PROFICIENCY REQUIREMENTS

English 110: English Composition and English 120: Composition and Literary Forms or exemption by examination are required of all students. In addition, students who do not submit properly written work throughout their college careers may be referred by professors of any department to the Composition Proficiency Committee.

## Mathematics

One Course
The one course in mathematics must be Mathematics 108: Finite Math, or a higher level course (except that Mathematics 105: General Mathematics may be substituted by Elementary Education majors).
Physical Education
Two Activities Courses

## SPECIFIC DEGREE REQUIREMENTS

Candidates for the Bachelor of Arts Degree complete the above General Education program and the following foreign language requirement in lieu of the mathematics and science requirement for the Bachelor of Science Degree.

## Foreign Language

Zero to Four Courses
Placement in foreign language is dependent upon a placement examination given at the College and upon the student's secondary school work. Successful completion of the intermediate level is required.

Candidates for the Bachelor of Science Degree complete the above General Education program and the following requirement in mathematics and science in lieu of the foreign language requirement for the Bachelor of Arts Degree.
Mathematics and Science
Two Courses
The Bachelor of Science Degree is offered with concentrations in a number of disciplines (see page 99). In addition to the mathematics and science courses chosen above, candidates for the degree must complete either one mathematics course and one science course or two science courses from courses numbered 120 or above in the Departments of Biology, Chemistry, Mathematics and Computer Science, and Physics.

## REQUIREMENTS IN THE FIELD OF CONCENTRATION

A departmental major consists of a concentration of not less than thirty units and not more than 48 units of credit, including all prerequisite and supporting courses specified by the department. Exceptions to this limitation are made in the cases of the following interdepartmental majors. Computer Science and Mathematics, Elementary Education, International Studies, Medical Technology, and Physical Science. A minimum of 18 units of credit must be chosen from a single department with related courses sufficient to bring the total to at least thirty units.

Near the end of the sophomore year or before the beginning of the junior year, a program of courses in the major department and related courses comprising the concentration is developed for each student by the student and his or her faculty advisor. A copy of this program must be filed in the office of the Registrar. Any changes in the proposed concentration after it has been started must likewise have the approval of both the faculty advisor and the Dean for Academic Affairs and be recorded in the Office of the Registrar.

Each student must earn quality points equal to twice the number of units of credit composing the concentration and show satisfactory achievement on a comprehensive examination covering the major. Suitable concentrations from which the student may choose are listed below.

Candidates for the Bachelor of Arts degree may elect any of the following majors; candidates for the Bachelor of Science degree may elect any of the majors marked by an asterisk: Art, Biology*, Business Administration*, Chemistry*, Computer Science and Mathematics*, Economics*, Elementary Education*, English, French, General Science*, German, Health and Physical Education*, Health Education*, History, History and Political Science, Home Economics*, International Studies, Mathematics*, Medical Technology*, Music, Philosophy and Religion, Physical Science*, Physics*, Physics and Mathematics*, Psychology*, Sociology*, Spanish.

A student who wishes to achieve a major in two fields must recognize the possibility that more than four academic years may be required to complete such a program. A student who pursues two major fields declares a primary major and a secondary major and must complete both programs, including satisfactory performance in each comprehensive examination. Candidates for graduation with honors and with two majors must meet the comprehensive examination criterion in each major as stated on page 24 . No more than two major fields will be denoted on a student's permanent academic record.

Comprehensive Examinations. A candidate for graduation must pass a written comprehensive examination over the student's major field of concentration. The examinations are selected or made, administered, and graded under the direction of the student's major department chairman. This examination is administered prior to March 15 of the year in which the student is expected to finish the work for graduation.

A candidate for graduation whose written comprehensive is unsatisfactory is required to take an oral comprehensive as a check, and the student will not be eligible for graduation with honors. The oral comprehensive, if required, is administered prior to May 1 by the student's major department chairman with the assistance of two other professors appointed by the department chairman and the Dean for Academic Affairs. In case the achievement of the student is found unsatisfactory on the oral, the chairman of the committee reports immediately to the Dean for Academic Affairs who, with the assistance of the Council on Education, proposes a program for remedial action.

## ELECTIVES

In addition to the courses required for general education and concentration, elective courses sufficient to bring the total to at least 123 units are required. A minimum of forty-eight units of the 123 must be completed in courses numbered 300 or above.

Approximately ten courses, or 30 units, will normally be electives. These should be selected with care to fulfill needs for certification to teach, to enter graduate school, or for other special purposes. Students interested in teaching in the public schools should read the requirements for certification stated on pages 52 and 53 and confer with the Chairman of the Department of Education. This should be done not later than the end of the freshman year.

Degree
Requirements (Cont.)

WILLIAM H. GROSECLOSE Penn Laird, Virginia
JAMES L. KEELER Timberville, Virginia
IRA D. LAYMAN Daleville, Virginia
EDITH T. MICHAUD (Florida and Puerto Rico)* Jacksonville, Florida
HARVEY H. SCOTT Harrisonburg, Virginia
PHILLIP C. STONE Harrisonburg, Virginia
NELSON T. WETSEL Harrisonburg, Virginia
ERNEST W. AUSHERMAN
GEORGE E. BRYAN
Frederick, Maryland
LESTER B. HERSHEY
LESTER B. HERSHEY Dayton, Virginia
CLETUS E. HOUFF
CLETUS E. HOUFF Mt. Sidney, Virginia Mt. Sidney, Virginia
GARLAND F. MILLER
GARLAND F. MILLER Bridgewater, Virginia Bridgewater, Virginia
MARGARET FLORY WAMPLER
MARGARET FLORY WAMPLER Harrisonburg, Virginia Harrisonburg, Virginia R. LOWELL WINE R. LOWELL WINE Roanoke, Virginia Roanoke, VirginiaTerm Expires 1985
Term Expires 1986
WILLIAM L. BROWN Johnston, Iowa
ALVIN E. CONNER Manassas, Virginia
VIOLET S. COX ..... Blacksburg, Virginia
J. MANLEY GARBER Woodbridge, Virginia
RODNEY I. SMITH Midland, Virginia
ERNEST C. SPOERLEIN Oakland, Maryland
J. PAUL WAMPLER (Alumni Representative) Manassas, Virginia
Term Expires 1987
J. MICHAEL FIKE (West Marva)* Aurora, West Virginia
WENDELL P. FLORY (Mid-Atlantic)* Easton, Maryland
ROBERT EARLE HOUFF (Shenandoah)* Waynesboro, Virginia
A. LEO HOWELL Port Republic, Virginia
PAUL W. PETCHER (Southeastern)* Chatom, Alabama
WILLIAM A. SAR (Virlina)* Roanoke, Virginia
WINSTON O. WEAVER Harrisonburg, Virginia

ORGANIZATION OF
Term Expires 1988
W. WALLACE HATCHER (Alumni Representative) Broadway, Virginia
ARLENE R. MAY Timberville, Virginia
L. MANNING MUNTZING Washington, D.C.
FRANK C. RITTENHOUSE Timonium, Maryland
LOREN S. SIMPSON Westminster, Maryland
BARBARA C. STONE Bassett, Virginia
WILLIAM D. WAMPLER Harrisonburg, Virginia
WAYNE F. GEISERT Bridgewater, Virginia* * * * *
$\square$*The geographic name in parentheses after the name of a particular trusteeidentifies the district of the Church of the Brethren which nominated the trustee priorto election by the Board of Trustees.
GARLAND F. MILLER Chairman
WAYNE F. GEISERT PresidentJAMES L. KEELER . . . . . Vice Chairman for Development and Public RelationsPHILLIP C. STONE . . . Vice Chairman for Educational Policy and Campus LifeW. WALLACE HATCHERSecretary
BEN F. WADE Assistant Secretary
BridgewaterMELVIN D. WAMPLERTreasurer
Bridgewater
Honorary Trustees
GEORGE S. ALDHIZER, II Broadway, Virginia
HARRY F. BYRD, JR. Washington, D.C.
PAUL J. HARTMAN Nashville, Tennessee
WILMER M. KLINE Manassas, Virginia
BENJAMIN O. WAKEMAN Manassas, Virginia
Life Trustees
FREDERICK D. DOVE Hagerstown, Maryland
HARRY A. DRIVER Weyers Cave, Virginia WALTER S. FLORY, JR. . . . . . . . . . . . . . . . . . . . . . Winston-Salem, North Carolina D. WILMER GARBER Woodbridge, Virginia
JOHN M. KLINE, JR Mt. Crawford, Virginia
CHARLES D. LANTZ Broadway, Virginia
ROBERT M. McKINNEY Westminster, Maryland
RUSSELL MILLER Arlington, Virginia
H. GUS MUNTZING Moorefield, West Virginia R. DOUGLAS NININGER, Chairman Emeritus ROBERT D. ROYER


## Office of the President

Wayne F. Geisert, A.B., Ph.D. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . President
Mary Lou Miller, B.A. . . . . . . . . . . . . . . . . . . Secretary to the President

## Office of the Provost

Ben F. Wade, B.A., M.Div., S.T.M., M.S., Ph.D. . . . . . . . . . . . . . . . . . . . . . . Provost



William D. Miracle, A.B., M.Ed., Ed.D. . . . . . . . . . Dean for Student Development
Brian C. Hildebrand, B.A., M.A., M.Ed. . . . . . . . . . . . Associate Dean for
Counseling Services
Leigh Anne Duff, B.S., M.S. . . . . . . . . . . Assistant Dean for Student Development
Linda F. Huntley . . . . . . . . . . . Secretary to the Dean for Student Development

Financial Aids
J. Vern Fairchilds, Jr., B.A. . . . . . . . . . . . . . . . . . . . . . . . . Director of Financial Aids
Cindy K. Garletts, B.S. . . . . . . . . . . . . . . . . . . . . . Secretary in Financtor of Financial Aids
Louise C. Newell . . . . . . . . . . . . .

## Alexander Mack Memorial Library

Ruth A. Greenawalt, B.S. in Ed., M.S. (L.S.) . . . . . . . . . . . . . . . . . . Library Director Larry C. Seilhamer, B.A., M.S. (L.S.) . . . . . . . . . Assistant Librarian for Cataloging Buu Duong, B.S., M.A., Ph.D. . . . . . . . . . . . . . Assistant Librarian for Acquisitions M. Alison Freeland, B.S. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Public Services Clerk

Audrey K. Moats Secretary in Library
Phillis R. Ward
Cataloging Clerk

## Student Development

Admissions
Phill R. War. Cataloging Clerk

Administrative Officers and Staff

## Career Planning and Placement

Martha B. Thornton, B.S., M.A., Ed.R.D. . . . . . . . Coordinator of Career Planning and Placement Madeline H. Hilbert . . . . . . . . Secretary in Career Planning and Placement Office<br>\section*{C. E. Shull Computing Center}<br>Theodore W. Flory, B.A., M.C.S. . . Manager of the C. E. Shull Computing Center Dean Royce Neher, B.A., M.A., Ph.D. . . . . . . . . . . . . . . . . . . . . . . . Faculty Associate Paul E. Sappington, B.S. . . . . . . . . . . . . . . . . . . . . . . . . . . . . Computer Programmer

Chaplain's Office
David G. Metzler, B.A., B.D., S.T.M., Th.D. . . . . . . . . . . . . . . . . . . . . . . . . Chaplain
Director of Athletics
Thomas M. Kinder, B.A., M.S., Ed.D. . . . . . . . . . . . . . . . . . . . Director of Athletics
Faculty Secretaries and Assistants
Bonnie M. Eckard . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Secretary in Bowman Hall
Curtis L. Kendall, B.S. . . . . . . . . . . . . . . . . . . . . . Assistant in Department of Health and Physical Education
Alice H. MacPhail*, B.S. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Assistant in Drama Elaine K. Shank . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Secretary in Founders Hall

Health Service
Rufus C. Huffman, M.D.; J. Douglas Smith, M.D. . . . . . . . . . . . College Physicians Linda S. Bowers, L.P.N. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . College Nurse

Kline Campus Center
Brian C. Hildebrand, B.A., M.A., M.Ed. . . . . . . . . . Director of Campus Programs Sherri R. Bolen, B.A., M.Ed. . . . . . . Assistant Director of the Kline Campus Center Eleanor E. Mumaw . . . . . . . . Switchboard Operator and Campus Center Secretary

Residence Hall Staff
Men's Residence Halls
Geoffrey E. Miller, B.A. . . . . . . . . . . . . . . . . . . . . . . Resident Director of Wright Hall Nancy E. Jackson, B.S.W. . . . . . . . . . . . . . . . . Resident Director of Wakeman Hall Steven C. Leist, B.S. . . . . . . . . . . . . . . . . . . . . . . . Resident Director of Heritage Hall Alan G. Lotz, B.S. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Resident Director Advisor
Women's Residence Halls
Sally Sharp, B.A Resident Director of Blue Ridge Hall Sally J. Boyar, B.S. S.

Beth J. Bardonner, B.A. Resident Director of Daleville Hall Karen L. Atkin, B.S., M.A. Resident Director of Dillon Hall Resident Director Advisor
Reuel B. Pritchett Museum
Jacob F. Replogle*, B.A., M. Div. Director
Office of the Business Manager and Treasurer
Melvin D. Wampler, B.S., M.Ed. . . . . . . . . . . . . . . Business Manager and Treasurer
E. Dustyn Miller, B.S., M.B.A. Assistant Business Manager
Amy M. Michael* Assistant to the Treasurer
Mary Lou Bourne, B.S. Controller
Edwin E. Will*, B.A., M.A Staff Assistant for National Direct Student Loan Program
Bertha D. Phibbs Secretary to the Business Manager and Treasurer
Belva M. Hill Secretary in Business Office
Lucille L. Robertson* Clerk in Business Office
Ina M. Shank*, B.S. Secretary in Business Office Marguerite M. Turner*. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Postmistress
Book Store
Leon W. Rhodes, B.A. Manager of the College Stores Betty W. Vandevander Clerk in Book Store Edna C. Shickel* Clerk in Book Store
Buildings and Grounds (ServiceMaster Industries, Inc.)
James F. Shaffner Director of Environmental ServicesRichard H. Berry, B.S., M.B.A. . . . . . . . . . . . . . . . . . . . . Director of HousekeepingElva S. HelmickSecretary in Buildings and Grounds Office
Food Service (Custom Management Corporation)
Karl J. Kwolek Director
Carolyne J. Schuckman Assistant Director

$\qquad$
Office of the Director of Development

## Office of the Director of Development

Brydon M. DeWitt, B.A., M.F.A Director of Development Pat Albright Dellett, A.B., M.Ed. . . . . . . . . . . . . Assistant Director of Development for Annual Giving \& Alumni Affairs William R. Swecker, B.S. . . . . . . . . . . . . . . . . . . Assistant Director of Development for Planned Giving
S. Earl Mitchell*, B.A., B.D., D.D. . . . . . . . . . . . . . . . Director of Church Relations
Kristin E. Whitehurst, B.A. . . . . . . . . . . . . . . . . . . . . Director of Public Information Betty J. Switzer . . . . . . . . . . . . . . . . . . . . . Secretary to the Director of Development Betty W. Swink . . . . . . . . . . . . . . . . . . . . . . . . . . . . Secretary in Development Office Leone C. Mumper, B.A. . . . . . . . . . . . . . . . . . . . . . . Secretary in Development Office Sandra H. Shiflet . . . . . . . . . . . . . . . . . . . . . . . . . . . . Secretary in Development Office Alice H. MacPhail*, B.S. . . . . . . . . . . . . . . . . . . . . . Secretary in Development Office

Administrative Officers and Staff

Wayne F. Geisert . . . . . . . . . . . . . . . . . . . . . . . President and Professor of Economics A.B., McPherson College; Ph.D., Northwestern University; Bridgewater College, 1964 -

Ben F. Wade . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Provost and Professor of Religion B.A., Bridgewater College; M.Div., United Theological Seminary; S.T.M., Boston University; M.S., Columbia University; Ph.D., Hartford Seminary Foundation; Bridgewater College, 1979 -

Warren D. Bowman
President Emeritus
B.A., Bridgewater College; M.A., University of Chicago; Ph.D., ibid.; D.D., Bethany Theological Seminary; LL.D., Bridgewater College; Bridgewater College, 1949-1964.
John W. Boitnott Dean of the College, Emeritus B.A., Bridgewater College; M.A., University of Virginia; Ph.D., ibid.; L.H.D., Bridgewater College; Bridgewater College, 1947-1967.

Raymond N. Andes
Professor of Foreign Languages, Emeritus B.A., Bridgewater College; M.A., University of North Carolina; Ph.D., ibid.; Summer Student, University of Paris, Institut d'Etudes francaises de Pau; Bridgewater College, 1946-1983.
A. Olivia Cool ............... Associate Professor of Piano and Theory, Emeritus B.A., Bridgewater College; Teacher's Certificate in Music, ibid.; Student, Johns Hopkins University; Peabody Conservatory of Music; M.Mus., American Conservatory of Music; Summer Student, Ithaca College; Bridgewater College, 19371940; 1942-1976.

Russell L. Dunlap
Associate Professor of English, Emeritus B.S., Slippery Rock State College; Litt. M., University of Pittsburgh; Graduate Study, University of North Carolina; Bridgewater College, 1964-1977.

Herman L. Horn . . . . . . . . . . Professor of Political Science and History, Emeritus B.A., Bridgewater College; M.A., Duke University; Ph.D., ibid.; Bridgewater College, 1967-1971.
S. Ruth Howe................. Associate Professor of Home Economics, Emeritus B.A., Manchester College; M.Sc., The Pennsylvania State University; Graduate Study, Columbia University, Syracuse University; Bridgewater College, 1945-1971.

Nelson T. Huffman . ......... . Professor of Voice and Director of Music, Emeritus B.A., Bridgewater College; Graduate, Peabody Conservatory of Music, Voice Certificate; B.M., Cincinnati Conservatory of Music; M.M., Northwestern University; D.Mus., Bridgewater College; 1925-1965.
Harry G. M. Jopson . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of Biology, Emeritus B.S., Haverford College; M.A., Cornell University; Ph.D., ibid.; Bridgewater College, 1936-1943; 1946-1981.

[^1]Bernard S. Logan. . . . . . . . . . . . . . Professor of Economics and Business, Emeritus B.A., Bridgewater College; M.S., University of Wisconsin; Ph.D., ibid.; Bridgewater College, 1959-1967; 1978-1984.
Clarence E. May
Professor of English, Emeritus B.A., Bridgewater College; M.A., University of Virginia; Graduate Study, Columbia University; School of Extra-mural Studies, University of Birmingham, Stratford-on-Avon; University of London; Bridgewater College, 1946-1968.
Lowell A. Miller. . . . . . . . . . . . . . . . . . Business Manager and Treasurer, Emeritus B.A., Bridgewater College; Graduate Study, Virginia Polytechnic Institute and State University; Bridgewater College, 1958-1983.
Ruth W. Stauffer . . . . . . . . . . . . . . . . . . . . . Assistant Professor of Music, Emeritus Graduate, Blue Ridge College, Department of Music; Graduate, Peabody Conservatory, Piano Certificate; Student, Johns Hopkins University; B.M., Cincinnati Conservatory of Music; Graduate Study, American Conservatory of Music; Organ Student, Virgil Fox, Chas. M. Courboin, and Nies-Berger; Bridgewater College, 1927-1970.

> John G. Barr. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of Organ and Piano B.S., Manchester College; S.M.M., Union Theological Seminary; D.S.M., ibid., Bridgewater College, 1968Emmert F. Bittinger . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professsor of Sociology B.A., Bridgewater College; M.A., University of Maryland; B.D., Bethany Theological Seminary; Ph.D., University of Maryland; Bridgewater College, 1963 -

Charles J. Churchman.
Professor of English
B.A., University of Virginia; M.A., ibid.; Ph.D., University of Tennessee; Bridgewater College, 1967 -
Lowell V. Heisey . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of Chemistry
Lowell V. Heisey .......................................................... Mefessor of Chemistry
B.A., Manchester College; M.S., Purdue University; Ph.D., ibid.; Bridgewater College, 1950 -
L. Michael Hill . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of Biology
B.S., Alabama College; M.S., Tennessee Technological University; Ph.D., University of New Hampshire; Bridgewater College, 1972 -
Frederick G. Keihn . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of Chemistry
B.S., Randolph-Macon College; M.S., Lehigh University; Ph.D., Syracuse University; Bridgewater College, 1967 -
Thomas M. Kinder . . . . Professor of Physical Education and Director of Athletics B.A., University of Charleston; M.S., Marshall University; Ed.D., Vanderbilt University; Bridgewater College, 1978 -
James J. Kirkwood . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of English
B.A., Wake Forest University; M.A., ibid.; Ph.D., Duke University; Bridgewater College, 1968 -
M. Ellsworth Kyger . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Professor of German
B.A., Bridgewater College; B.S., in Music Education, ibid.; Graduate Study,
University of Maryland; Ph.D., Catholic University; Bridgewater College, 1955-
M. Ellsworth Kyger . . . . . . . . . . . .............................. Professor of German
B.A., Bridgewater College; B.S., in Music Education, ibid.; Graduate Study,
University of Maryland; Ph.D., Catholic University; Bridgewater College, 1955-
M. Ellsworth Kyger . . . . . . . . . . . .............................. Professor of German
B.A., Bridgewater College; B.S., in Music Education, ibid.; Graduate Study,
University of Maryland; Ph.D., Catholic University; Bridgewater College, 1955-of North Carolina; Bridgewater College, 1961 -
W. Robert McFadden Professor of Religion and Director of Convocations B.A., Manchester College; B.D., Bethany Theological Seminary; Th.D., Boston University; Bridgewater College, 1961 -
William L. Mengebier Professor of Biology B.S., The Citadel; M.A., Oberlin College; Ph.D., University of Tennessee; Bridgewater College, 1968 -
David G. Metzler ..... Professor of Philosophy and Religion and College ChaplainB.A., McPherson College; B.D., Bethany Theological Seminary; S.T.M., Har-vard University; Th.D., Boston University; Bridgewater College, 1958-1962;1966-1982; 1983-
James A. Mumper Professor of HistoryB.A., Swarthmore College; M.Ed., University of Virginia; M.A., ibid.; Ph.D.,ibid.; Bridgewater College, 1962 -
Dean Royce Neher Professor of Computer Science and Physics B.S., McPherson College; M.S., University of Kansas; Ph.D., ibid.; Bridgewater College, 1961 -
Roger E. Sappington Professor of HistoryB.A., Manchester College; M.A., Duke University; B.D., Bethany TheologicalSeminary; Ph.D., Duke University; Bridgewater College, 1958 -
Thomas R. Thornley, Jr. Professor of Music B.A., University of South Carolina; M.M.E., ibid.; Ed.D., University of Virginia; Bridgewater College, 1972 -
Martha B. Thornton Professor of Religion and Coordinator of Career Planning and Placement B.S., Defiance College; M.A., Hartford Seminary Foundation; Ed.R.D., ibid.; Bridgewater College, 1968 -
Gary L. Tyeryar Professor of English B.A., Western Maryland College; M.A., Rice University; Ph.D., University of Wisconsin; Bridgewater College, 1968 -
Dale V. Ulrich Professor of Physics B.A., University of La Verne; M.S., University of Oregon; Ph.D., University of Virginia; Bridgewater College, 1958-1961; 1964 -
Fred F. Wampler Professor of Education B.A., Bridgewater College; M.A., George Washington University; Ed.D., Univer- sity of Maryland; Bridgewater College, 1957 -
Donald R. Witters Professor of PsychologyB.A., Elizabethtown College; B.D., Bethany Theological Seminary; M.A.,Arizona State University; Ph.D., ibid.; Bridgewater College, 1968 -

William E. Barnett Associate Professor of Sociology B.A., University of Richmond; M.A., University of Virginia; Graduate Study, North Carolina State University; Bridgewater College, 1955 -

Paul J. Bender . . . . . . . . . . . . . . . . . . . . . . . . . . Associate Professor of Mathematics B.S., Albright College; M.S., Ohio University; Ph.D., ibid.; Bridgewater College, 1976 -

George L. Fitchett . . . . . . . . . . . . . . Associate Professor of Business Administration B.S., United States Naval Academy; M.B.A., Harvard University; Bridgewater College, 1965 -
Jesse E. Hopkins, Jr. . . . . . . . . . . . . . . . . . . . . . . . . . . . Associate Professor of Music B.S., Bridgewater College; M.M.E., James Madison University; Graduate Study, University of Illinois; Bridgewater College, 1977 -
Robert B. Houts, Jr. . . . . . . . . . . . . . . . . . . . . . . . . . . Associate Professor of Spanish B.A., Bob Jones University; M.A., University of Tennessee; Graduate Study, University of Kentucky; Bridgewater College, 1963 -
Robert L. Hueston*. . . . . . . Carman G. Blough Associate Professor of Accounting B.A., Bethany College; M.B.A., University of Wisconsin; Certified Public Accountant; Bridgewater College, 1953 -
George Webster Kent Associate Professor of Psychology B.A., Franklin College; M.A., University of Oregon; Graduate Study, University of Wisconsin; Bridgewater College, 1954 -
Paul M. Kline . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Associate Professor of Art B.A., Bridgewater College; M.F.A., Virginia Commonwealth University; Bridgewater College, 1959 -
Ralph C. MacPhail, Jr. . ...... Associate Professor of Drama, Speech, and English B.A., Bridgewater College; M.F.A., Virginia Commonwealth University; Bridgewater College, 1972 -
Laura Susan Mapp . . ................ Associate Professor of Physical Education
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961 -
Lamar B. Neal ..............Associate Professor of Political Science and History
B.S., Mississippi State University; M.S., ibid.; J.D., University of Mississippi;
Laura Susan Mapp . . ................ Associate Professor of Physical Education
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961 -
Lamar B. Neal ..............Associate Professor of Political Science and History
B.S., Mississippi State University; M.S., ibid.; J.D., University of Mississippi;
Laura Susan Mapp . . ................ Associate Professor of Physical Education
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961 -
Lamar B. Neal ..............Associate Professor of Political Science and History
B.S., Mississippi State University; M.S., ibid.; J.D., University of Mississippi;
Laura Susan Mapp . . ................ Associate Professor of Physical Education
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961 -
Lamar B. Neal ..............Associate Professor of Political Science and History
B.S., Mississippi State University; M.S., ibid.; J.D., University of Mississippi;
Laura Susan Mapp . . ................ Associate Professor of Physical Education
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961 -
Lamar B. Neal ..............Associate Professor of Political Science and History
B.S., Mississippi State University; M.S., ibid.; J.D., University of Mississippi; LL.M., ibid.; Graduate Study, Tulane University; Bridgewater College, 1971 -
Robert E. Purvis ........................................ . Associate Professor of Art
Robert E. Purvis . . . . . . . . . . . . . . . . . . . . . . . . . . . Associate Professor of Art
B.A., Lynchburg College; M.F.A., Virginia Commonwealth University; Bridgewater College, 1968 -
W. Steve Watson, Jr. . . . . . . . . . . . Associate Professor of Philosophy and Religion B.A., Furman University; B.D., Southeastern Baptist Seminary; Graduate Study, Emory University; Bridgewater College, 1970-1981; 1983 -
John E. White ................................ Associate Professor of Mathematics B.A., Bridgewater College; M.S., Virginia Polytechnic Institute and State University; Bridgewater College, 1960-1963; 1965 -
K. Gary Adams ..................................... Assistant Professor of Music
B.M., Baylor University; M.M., ibid.; Ph.D., North Texas State University;
Bridgewater College, 1982-
William P. Albright . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of English
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., Univer-
sity of Omaha; Bridgewater College, 1967 -
K. Gary Adams ..................................... Assistant Professor of Music
B.M., Baylor University; M.M., ibid.; Ph.D., North Texas State University;
Bridgewater College, 1982-
William P. Albright . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of English
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., Univer-
sity of Omaha; Bridgewater College, 1967 -
K. Gary Adams ..................................... Assistant Professor of Music
B.M., Baylor University; M.M., ibid.; Ph.D., North Texas State University;
Bridgewater College, 1982-
William P. Albright . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of English
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., Univer-
sity of Omaha; Bridgewater College, 1967 -
K. Gary Adams ..................................... Assistant Professor of Music
B.M., Baylor University; M.M., ibid.; Ph.D., North Texas State University;
Bridgewater College, 1982-
William P. Albright . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of English
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., Univer-
sity of Omaha; Bridgewater College, 1967 -
K. Gary Adams ..................................... Assistant Professor of Music
B.M., Baylor University; M.M., ibid.; Ph.D., North Texas State University;
Bridgewater College, 1982-
William P. Albright . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of English
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., Univer-
sity of Omaha; Bridgewater College, 1967 sity of Omaha; Bridgewater College, 1967 -

Daniel W. Bly
Assistant Professor of History B.A., Bridgewater College; M.A., Temple University; Graduate Study, CarnegieMellon University, Temple University; Bridgewater College, 1965-1967; 1969-
John W. Cooper
Dean for Academic Affairs and Assistant Professor of Philosophy and Religion B.A., Florida State University; M.A, ibid.; Ph.D., Syracuse University; Bridgewater College, 1981 -
Jon L. Dellett Assistant Professor of Mathematics A.B., Fort Hays Kansas State College; M.A.L.S., Wesleyan University; M.S., New Mexico State University; Bridgewater College, 1972 -
Theodore W. Flory . . . . . . . . . . . . . . . . . . Assistant Professor of Computer Science and Manager of the C. E. Shull Computing Center B.A., Bridgewater College; M.C.S., University of Virginia; Bridgewater College, 1970-

Mary Frances Heishman
Assistant Professor of Physical Education B.A., Bridgewater College; M.A., James Madison University; Bridgewater College, 1970 -
Brian C. Hildebrand Assistant Professor of Education and Associate Dean for Counseling Services and Campus Programs B.A., Bridgewater College; M.A., James Madison University; M.Ed., ibid.; Graduate Study, University of New Mexico; Bridgewater College, 1967 -
Jesse E. Hopkins, Jr. . . . . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of Music B.S., Bridgewater College; M.M.E., James Madison University; Graduate Study, University of Illinois; Bridgewater College, 1977 -

Elizabeth L. Kyger* Assistant Professor of Biology B.A., Winthrop College; M.A., University of North Carolina; Bridgewater College, 1954-1958; 1966 -

Barbara P. Long Assistant Professor of Foreign Languages B.A., Mary Washington College; M.A., Middlebury College; M.A., Tulane University; Ph.D., ibid.; Bridgewater College, 1983 -

Naomi L. Mills . . . . . . . . . . . . . . . . . . . . Assistant Professor of Physical Education and Director of Swimming B.A., Arizona State University; M.S, ibid.; Bridgewater College, 1981 -

Melvin L. Myers
Assistant Professor of Physical Education B.A., Bridgewater College; M.S., West Virginia University; Bridgewater College, 1962-

John S. Spencer . . . . . . . . . . . . . . . . . . . . Assistant Professor of Physical Education B.A., Shepherd College; B.S., ibid.; M.A., Appalachian State University; Bridgewater College, 1967 -
Grace F. Steinberg $\qquad$ Assistant Professor of Home Economics B.S., William Woods College; M.S., University of Missouri at Columbia; Bridgewater College, 1981 -

> Janet W. Stevens . . . . . . . . . . . . . . . . . . . . . Assistant Professor of Home Economics B.S., University of Maryland; M.Ed., James Madison University; Bridgewater College, 1978 -
> Sarah E. Swank . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Assistant Professor of Biology B.S., James Madison University; M.A., University of Virginia; Ph.D., University of Southern California; Bridgewater College, 1981 -
> John S. Virkler. . . . . . . . . . Interim Assistant Professor of Economics and Business B.A., University of Richmond, M.Div., Southwestern Baptist Theological Seminary; M.A.C.T., Auburn University, M.A. candidate, Auburn University; M.A.P.A. candidate, Ph.D. candidate, University of Virginia; Bridgewater College, 1984 -
> Carlyle Whitelow
> Assistant Professor of Physical Education, Assistant Football Coach and Assistant Basketball Coach B.A., Bridgewater College; M.Ed., University of Virginia; Bridgewater College, 1969 -
> Helen H. Annan* . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in History and English A.B., Stetson University; M.A., ibid.; Bridgewater College 1981 -
> Martha S. Armstrong
> Instructor in Accounting and Business Administration B.A., Bridgewater; M.S., University of Virginia; Bridgewater College, 1978 -
> Philip L. Ash, Jr.* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Criminology B.S., University of Wisconsin; M.A., Michigan State University; M.S., George Washington University; Bridgewater College, 1982 -

Kathryn Reid Bowman* . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Education B.A., Bridgewater College; M.S, James Madison University; Bridgewater College, 1974 -
Rory J. Frey*
Instructor in Business B.A., Virginia Military Institute; B.B.A., James Madison University; M.B.A., University of Missouri; Bridgewater College, 1984 -
Rose M. Garrison* . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Home Economics B.S., James Madison University; M.S., University of Massachusetts; Bridgewater College, 1982 -
Carson C. Good* Instructor in Social Work
B.A., Bridgewater College; M.S.W., Virginia Commonwealth University; Bridgewater College, 1977 -
David C. Huffman
Instructor in Economics B.A., Bridgewater College; M.A., University of Virginia; Bridgewater College, 1980 -
David A. Penrod* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Business Law
David A. Penrod* ........................................................... Brictor in Business Law
B.A., Bridgewater College; J.D., Ohio State University; Bridgewater College; 1973 -
Shane D. Stevens . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Business and
Shane D. Stevens . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Business and
Assistant Director of Swimming
B.A., Bridgewater College; M.B.A., James Madison University; Bridgewater
Shane D. Stevens . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Instructor in Business and
Assistant Director of Swimming
B.A., Bridgewater College; M.B.A., James Madison University; Bridgewater College, 1982 -

Faculty (Cont.)

## Faculty <br> Councills <br> and <br> Committees

> Louise H. Wade* Instructor in Special Education
C. Committee on Admissions and Student Aids: *Cooper, Dellett, Fairchilds, Glover, Miracle, Sappington.
D. Committee on Convocations: *McFadden, Armstrong, Barnett, Churchman, Cooper, Heishman, Keihn, Kent, Miracle, two students.
E. Committee on English Composition Proficiency: *Kirkwood, Churchman, M. E. Kyger.
F. Endowed Lectureships Committee: *Ulrich, DeWitt, Kirkwood, MacPhail, McFadden.
G. Committee on Health Professions: *Martin, Kirkwood, Mengebier, Ulrich.
H. Committee on the Library: *Mumper, Bender, Bly, Churchman, Greenawalt, Hill, Myers, Neal, two students.
I. Committee on the Philomathean: *Sappington, Heisey, Kline, Tyeryar.

Council on Student Affairs: *Miracle, Adams, Armstrong, Duff, Flory, Hildebrand, Metzler, Wade, four students.
A. Committee on Cultural Activities: *MacPhail, **Hopkins, Bolen, Long, McFadden, Metzler, Purvis, Steinberg, two students.
B. Committee on International Students: *Ulrich, Cooper, M. E. Kyger, Long, Metzler, Miracle, Watson.
C. Committee on Student Publications and Communications: *Miracle, Albright, DeWitt, Tyeryar, Whitehurst, five students.
D. Automobile and Traffic Committee: *Miracle, **M. Wampler, D. Miller, Shaffner.

Council on Religious Activities: *Metzler, Barr, Churchman, Hill, Houts, Judd, Mengebier, Mitchell, Whitelow, four students.
A. Committee on Church Deputations: *Metzler, Barr, Heishman, Hopkins, MacPhail, Mitchell, Stevens, two students.
B. Committee on Spiritual Life Institute: *Mitchell, Geisert, Judd, McFadden, Metzler, S. R. Wampler.
Council on Athletics: *Kinder, Geisert, Huffman, Kline, Mapp, Swank, M. Wampler, three students.

[^2]Faculty Councils and Committees (Cont.)

Enrollment Statistics

## COLLEGE

 CALENDAR 1985-86
## Enrollment

| Session |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1983-84 | Men | Women | Total | Summer School | 1984 |  |  |
| Seniors. | 84 | 89 | 173 |  | Men | Women | Total |
| Juniors. | 92 | 83 | 175 |  |  |  |  |
| Sophomores | 99 | 121 | 220 | Resident |  |  |  |
| Freshmen | $\underline{106}$ | $\underline{133}$ | $\underline{239}$ | students | 15 | 11 | 26 |
| F.T. Totals | 381 | 426 | 807 | Non-resident |  |  |  |
| Part-time \& |  |  |  | students. | 24 | 16 | 40 |
| Audit | 3 | 11 | 14 | Totals. | 39 | 27 | 66 |
| Totals. | 384 | 437 | 821 |  |  |  |  |
| Telecourse (P.T.) . . . | 9 | 21 | 30 |  |  |  |  |
| All persons served. .. | 393 | 458 | 851 |  |  |  |  |

An integral part of Bridgewater's academic program is the 3-3-1-3 calendar. The numbers 3-3-1-3 refer to the number of courses a student studies in 10-10-3-10 week terms, respectively.For 1985-86, the specific calendar is given on page 115.

Many advantages over traditional college calendars are gained through use of the 3-3-1-3 calendar. Some of these advantages accrue because unusual opportunities are afforded; some of them result from a retention of proven procedures. Among the advantages are the following:

- Students study fewer courses at one time, but study them more intently than under the traditional semester or quarter calendars. Classes typically meet four sixty-minute periods per week, giving ample time for instruction to be congruent with the credit given.
- Professors teach fewer courses at one time than under the traditional semester or quarter calendars.
- The unit of credit is equivalent to the semester hour. Thus, transfer of credits is facilitated.
- Three and four unit courses, the same size as under the semester calendar, are retained.
- Included is a three-week Interterm during which students study a single course or engage in independent study and research. Interterm classes, with a flexible classroom schedule, are able to engage in extended discussions, off-campus excursions, or extensive field work.
- Scheduled at the end of February and the first of March, the Interterm provides a timely change in the routine in the long period between January and June.

Index Accounting ..... 50
Accreditation ..... 10
Administrative Officers ..... 103
Administrative and
Educational Facilities
Bowman Hall ..... 12
Campus Center ..... 13
Cole Hall ..... 12
College Street Church ..... 13
Flory Hall ..... 12
Jopson Field ..... 13
Library ..... 12
Memorial Hall ..... 12
Moomaw Hall ..... 16
Museum ..... 16
Nininger Hall ..... 12
Admission Requirements ..... 27
Advanced Placement and Credit ..... 28
Alumni Association ..... 26
Application Procedure ..... 27
Art Department ..... 43
Athletics ..... 19
Biology Department ..... 44
Business ..... 40
Business Administration Department ..... 50
Calendar ..... 115
Career Planning ..... 22
Career Opportunities ..... 40
Certification of Teachers ..... 51
Chemistry Department ..... 47
Church Affiliation ..... 8
Class Attendance ..... 91
Classificaton of Students ..... 91
Comprehensive Examinations ..... 99
Computer Science ..... 40, 74
Computing Center, C. E. Shull ..... 16
Concentration
Requirements ..... 98
Convocations ..... 19
Costs (See Expenses)
Councils and Committees ..... 112
Counseling and Guidance ..... 21
Cultural and Social
Activities ..... 19
Curriculum ..... 94
Dean's List ..... 24
Degree Requirements ..... 94
Dentistry ..... 40
Departments of Instruction Art ..... 43
Biology ..... 44
Chemistry ..... 47
Economics and Business ..... 49
Education ..... 51
English ..... 56
Foreign Languages ..... 58
Health and Physical Education ..... 63
History and Political Science. ..... 65
Home Economics ..... 69
Mathematics and Computer Science ..... 72
Music ..... 76
Philosophy and Religion ..... 80
Physics ..... 83
Psychology ..... 84
Sociology ..... 86
Dramatics ..... 20
Economics Department ..... 49
Education Department ..... 51
Electives ..... 99
Engineering ..... 40
English Department ..... 56
Enrollment Summary ..... 114
Expenses ..... 29
Full-time students ..... 30
Part-time students ..... 30
Special Fees ..... 31
Deposits ..... 31
Variable Expenses ..... 32
Private Instruction ..... 32
Refunds ..... 32
Methods of Payment ..... 32
Faculty ..... 106
Financial Assistance
Scholarships and Grants ..... 34
Work Opportunities ..... 37
Federal Government
Scholarships and Grants ..... 38
Work-Study Program ..... 38
Student Loan Funds. ..... 39
Foreign Languages Department ..... 58
Forensics ..... 20
Forestry ..... 40
General Education
Requirements ..... 95
Government Service ..... 41
Grading System ..... 92
Graduate School ..... 41
Health and Physical Education Department ..... 63
Health Service ..... 22
History and Political Science Department ..... 65
History of the College ..... 8
Home Economics ..... 41
Home Economics Department ..... 69
Honor Societies and Clubs ..... 24
Honor System ..... 17
Honors Courses ..... 43
Honors, Graduation ..... 24
Insurance, Accident ..... 29
Internships ..... 42
Law ..... 41
Lambda Society ..... 24
Map
Campus ..... 14
Regional ..... 118
Mathematics Department ..... 72
Medicine ..... 41
Medical Technology ..... 41, 44
Ministry ..... 41
Museum, Reuel B. Pritchett ..... 16
Music Activities ..... 20
Music Department ..... 76
Objectives ..... 7
Orientation ..... 21
Overload Policy ..... 93
Part-Time Students ..... 30
Pharmacy ..... 40
Philosophy Department ..... 80
Physical Science Major. ..... 83
Physics Department ..... 83
Placement ..... 22
Political Science ..... 68
Prizes Awarded ..... 25
Probation, Academic ..... 93
Program Council ..... 19
Psychology Department ..... 84
Publications ..... 20
Quality Points ..... 91
Readmission ..... 28
Registration ..... 91
Regulations
Academic ..... 91
Campus ..... 17
Resident Hall ..... 18
Religion Department ..... 81
Religious Life and Services ..... 22
Reports, Grade ..... 92
Residence Halls
Blue Ridge Hall ..... 11
Daleville Hall ..... 11
Dillon Hall ..... 11
Heritage Hall ..... 11
Wakeman Hall ..... 11
Wright Hall ..... 11
Scholarship, Minimum Standards ..... 92
Scholarship Sources ..... 36
Scholarships and Grants. ..... 34
Sociology Department ..... 86
Social Work ..... 42
Student Loan Funds ..... 38
Student Organizations Athletics ..... 19
Dramatics ..... 20
Forensics ..... 20
Music ..... 20
Publications ..... 20
Departmental Clubs ..... 21
Student Senate ..... 17
Study Abroad Program ..... 23
Summer Session ..... 26
Suspension, Academic ..... 93
Teaching ..... 42
Telecourses ..... 88
Transfer Credit ..... 28
Trustees ..... 101, 102
Unit of Credit ..... 91
Vehicle Registration ..... 31
Withdrawal from College ..... 32
Work Opportunities ..... 37

Index (Cont.)

## Travel Directions



Bridgewater College is located seven miles southwest of Harrisonburg in the town of Bridgewater in the Shenandoah Valley. It is easily accessible by automobile, bus, and air. Motorists traveling on Interstate 81 may reach Bridgewater by exiting at the Mt. Crawford-Bridgewater Exit (Exit 61, six miles south of Harrisonburg) and following State Route 257 which is the northern boundary of the College campus. Piedmont Airlines serve Bridgewater. Travelers to and from Bridgewater emplane and deplane at the Shenandoah Valley airport (listed on timetables as the Staunton terminal) near Weyers Cave. Auto rental and limousine service are available. Greyhound buses serve Harrisonburg, and taxis are available in Harrisonburg and Bridgewater. Following are mileages to some cities:

Baltimore, Md. . . . . . . . . . . . . . . . . . 180
Charleston, W. Va. ................ . 235
Columbus, Ohio . . . . . . . . . . . . . . . . 325
Dover, Del. . . . . . . . . . . . . . . . . . . . . . 220
Hagerstown, Md. . . . . . . . . . . . . . . . 110
Harrisburg, Pa. . . . . . . . . . . . . . . . . . 180
Johnson City, Tenn. .............. . . 278
Lynchburg, Va...................... . . . . 95
Morgantown, W. Va................ . . 150
New York, N.Y. ..... 345
Norfolk, Va. ..... 215
Philadelphia, Pa. ..... 265
Pittsburgh, Pa. ..... 220
Raleigh, N.C. ..... 230
Richmond, Va. ..... 125
Roanoke, Va. ..... 110
Washington, D.C. ..... 125
Winston-Salem, N.C ..... 184




[^0]:    Ancient and Medieval Period
    Art 231: Art History
    *English 201: Western Thought in Literature: The Greek Foundation
    English 341: English Literature to 1500
    *History 101: Western Civilization to 1500
    Philosophy 311: The Classical Mind
    *Religion 200: Biblical Studies
    *Religion 210: Old Testament
    Religion 220: New Testament
    Religion 310: Jesus of History

    ## Renaissance and Early Modern Period

    Art 232: Art History
    Drama 370: English Drama to 1800
    *English 202: Western Thought in Literature: The Renaissance
    English 330: Shakespeare
    English 351: Seventeenth-Century English Literature
    English 361: Eighteenth-Century English Literature
    English 401: American Literature to 1880
    French 330: The Classical Period
    French 350: Age of Enlightenment
    *History 102: Western Civilization from 1500 to 1815
    History 201: United States Civilization
    History 320: Renaissance and Reformation
    Music 311: History of Medieval, Renaissance, and Baroque Music
    Music 220: Introduction to Western Music from 1500 to 1870
    Music 370: History of Dramatic Music
    Philosophy 312: The Evolution of the Modern Mind

[^1]:    Agnes V. Kline Librarian, Emeritus B.A., Bridgewater College; B.S., George Peabody School of Library Science; Bridgewater College, 1930-1969.

[^2]:    *Chairman **Vice Chairman
    Note: The Provost of the College is an ex-officio member of all academic and student life related committees. The President of the College is an ex-officio member of all committees.

