

Bulletin of the

UNIVERSITY OF VERMONT
AND STATE AGRICULTURAL COLLEGE

BURLINGTON, VERMONT

APRIL
1951

Correspondence

ADMISSIONS: For all matters pertaining to the admission of undergraduate students, including requisitions for the catalogue, and information concerning rooms, tuitions, and scholarships *Director of Admissions*

Adult Education *Director of Adult Education*

College of Medicine *Dean, College of Medicine*

Graduate Division *Director of Graduate Study*

Summer Session *Director of the Summer Session*

TRANSCRIPTS OF RECORDS *Office of the Registrar*

EMPLOYMENT OF SENIORS AND ALUMNI *Director of Placement*

MATTERS OF ALUMNI INTEREST *Alumni Secretary*

MATTERS OF GENERAL UNIVERSITY INTEREST *The President*

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BULLETIN of the
UNIVERSITY OF VERMONT
and STATE AGRICULTURAL COLLEGE



THE CATALOGUE - 1950-1951
ANNOUNCEMENTS - 1951-1952

U V M ★

§ The University is located at Burlington, Vermont, overlooking an attractive tree-shaded city situated on the shores of Lake Champlain.

§ Burlington, the largest city in the state with a population of 30,000, is 100 miles from Montreal, 240 miles from Boston, and 300 miles from New York City. The city enjoys fast daily plane service to these urban points in addition to regular railroad and bus service.

§ Chartered in 1791, the University is the eighteenth oldest institution of higher learning in the United States and the first institution founded by state legislative action to offer instruction at the university level.

§ Within the seven divisions of the University, instruction is offered in fifty-four different curricula, of which thirty-nine are professional and fifteen non-professional.

§ The University is fully accredited by the following accrediting agencies and learned societies:

The Association of American Universities

The New England Association of Colleges and Secondary Schools

The Association of American Colleges

The American Association of Colleges for Teacher Education

The American Medical Association

The Engineers Council for Professional Development

The American Chemical Society

§ Currently enrolled are 3,161 students, of whom 1,625 are residents of Vermont; the remainder represent 27 states and 11 foreign countries.

★ UVM, the popular method of referring to the University, is derived from the Latin — *Universitas Viridis Montis*.

UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLEGE

Educational Opportunities

The University of Vermont and State Agricultural College aims to provide for qualified young men and women the opportunity to acquire an understanding and appreciation of the main fields of human knowledge, to develop those qualities of mind and character which will enable them to assume responsible leadership among their fellow men, and to lay the foundations for successful careers. In the process of achieving these aims, the University believes that a student will grow in self-mastery and personal depth, will learn to reason logically, and will develop open-mindedness and tolerance toward the opinion of others.

The instructional activities of the University are organized under five colleges—Agriculture, Arts and Sciences, Education and Nursing, Medicine, and Technology; the School of Dental Hygiene; and the Graduate Council. Within these seven instructional divisions, students may select from a wide variety of curricula.

THE COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences provides a general liberal four-year curriculum leading to the degree of Bachelor of Arts, with opportunity for concentration in one or more of the following departments: Botany, Chemistry, Economics, English, Geology, German, Greek, History, Latin, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Romance Languages (French and Spanish), and Zoology. It also offers a four-year professional curriculum leading to the degree of Bachelor of Science in Medical Technology.

All pre-professional requirements for admission to colleges of medicine, dentistry, law, and theology may be met in the College of Arts and Sciences by a proper selection of electives. Those who have completed three years of pre-medical study at the University may qualify, on application, for the degree of Bachelor of Science after successfully completing one year of study in an approved college of medicine.

THE COLLEGE OF TECHNOLOGY

The College of Technology offers four-year curricula leading to the degree of Bachelor of Science in Civil Engineering, Electrical Engineering, Management Engineering, or Mechanical Engineering. Certain departments of this college also offer specialized four-year curricula leading to the professional degree of Bachelor of Science in Chemistry or the Bachelor of Science in Commerce and Economics (Business Administration).

Options in Commerce and Economics during the junior and senior years are: Accounting, Banking, Finance and Insurance, Business Administration, Hotel and Resort Management, Industrial Management, Marketing and Merchandising, Personnel Management, and Secretarial Studies.

THE COLLEGE OF AGRICULTURE

The College of Agriculture offers a four-year curriculum leading to the degree of Bachelor of Science in Agriculture, which includes both general and specialized training. The fields of specialization are Agricultural Economics, Agricultural Education, Agronomy, Botany, Dairy Manufacturing, Dairy Production, Horticulture, and Poultry Husbandry. There is also offered in co-operation with the College of Technology a four-year curriculum in Agricultural Engineering which leads to the degree of Bachelor of Science in Agricultural Engineering. A two-year program of courses is offered to prepare students for admission to professional training in veterinary science and forestry at other institutions.

The College of Agriculture also offers a four-year curriculum leading to the degree of Bachelor of Science in Home Economics, with specialization in one of the following fields: Food and Nutrition; Clothing, Textiles, and Related Arts; Home Economics Education; and General Home Economics.

THE COLLEGE OF EDUCATION AND NURSING

The College of Education and Nursing offers four-year curricula leading to the following degrees: in Elementary, Junior High, Secondary, and Industrial Education, the degree of Bachelor of Science in Education; in Business Education, the degree of Bachelor of Science in Business Education; and in Music Education, the degree of Bachelor of Science in Music Education.

This College also offers a five-year curriculum leading to the degree of Bachelor of Science in Nursing, and a three-year curriculum for graduate nurses leading to the degree of Bachelor of Science in Nursing Education.

THE SCHOOL OF DENTAL HYGIENE

The School of Dental Hygiene offers a two-year curriculum leading to a Certificate in Dental Hygiene. Recipients of this certificate are eligible to take the State Board Examination for licensing as Dental Hygienists. Enrollment is limited to women.

THE COLLEGE OF MEDICINE

The College of Medicine offers a four-year curriculum leading to the degree of Doctor of Medicine and also offers graduate courses in specialty fields.

GRADUATE STUDY

Under the supervision of the Graduate Council, instruction is given leading to one or another of several advanced degrees. The student may elect to work for his appropriate degree in many departments of the University.

The History

The University owes its foundation to Ira Allen, who gave four thousand pounds to help establish a university in Burlington. He had aided more than any other one man in forming the State and in preserving its integrity through the troubled years preceding its admission to the Union. In 1791 the first General Assembly of the new State granted the charter for the University. Instruction was begun by the first president, Daniel C. Sanders, in 1800 and four years later the first class was graduated. In 1872 women were first admitted.

The Hon. Justin S. Morrill, Representative and later Senator from Vermont, sponsored the Morrill Land Grant Act of 1862, which provided for colleges to teach liberal and scientific courses, including Agriculture and the Mechanic Arts. Under this act the Legislature chartered the Vermont Agricultural College in 1864. A year later the two corporations were joined by legislative act in a new corporation, the University of Vermont and State Agricultural College. Later the Experiment Station and Extension Service were established by the Legislature. Courses in Civil Engineering were first given in 1829. Four-year curricula in Civil, Electrical, Mechanical, and Management Engineering have followed.

The study of Medicine began with the appointment in 1804 of a lecturer in Chirurgery and Anatomy, and a full course of Medical Lectures

was offered in 1822 by the cooperation of an association of doctors and the University. From this developed the Medical College. Since 1920, women have been admitted to this college.

Since 1944, the University has offered pre-clinical classroom instruction for the nursing students of most Vermont hospitals.

In 1946, the University was re-organized into its present divisions. Some of the most recently added curricula include Nursing, Business Administration, Agricultural Engineering, Industrial Education, and Business Education.

In the summer of 1948, the University sponsored its first foreign study program. Under this program, known as *The Marshall Plan in Action Course*, a group of 300 students and seven faculty members from many American colleges and universities traveled through Western Europe to study the European Recovery Program at first hand. The School of Dental Hygiene enrolled its first students in the fall of 1949. In the summer of 1950 the University sponsored its first Securities Markets Course in the New York financial district.

The Campus

The grounds of the University at present include the main campus of about seventy-five acres on which most of the academic and administrative buildings are located around a large, tree-shaded "College Green." That section of the main campus which lies between The Green and Converse Hall has been developed recently by the erection of several buildings and is now known as the East Campus.

Three blocks south of The Green is Redstone Campus, a beautiful residential area for women students which commands an unparalleled view of Mt. Mansfield and Camel's Hump.

Centennial Athletic Field, an eleven-acre tract a short distance east of the main campus, provides excellent facilities for intercollegiate athletic contests. The seating capacity of the football stadium is approximately 5,000 and of the baseball stadium, approximately 3,000.

The University Farm of 300 acres and the Hoag Farm of 150 acres adjoin the campus and are equipped for teaching and research. There is also a research forest of 350 acres located in Jericho, another of 200 acres on Pease Mountain in Charlotte, and the Proctor Maple Research Farm of 180 acres in Underhill.

The physical plant of the University is valued in excess of \$5,600,000.

University Buildings

The following buildings are located on or near the College Green:

IRA ALLEN CHAPEL: This fine example of Georgian architecture, which was erected on the northeast corner of The Green in 1927, is the gift of James B. Wilbur of Manchester, Vermont, and is named for the founder of the University. The Chapel contains an excellent three-manual organ and has a seating capacity of twelve hundred.

BILLINGS LIBRARY: Located next to the Chapel on College Row, Billings Library is an excellent example of Richardson architecture. It is the gift of Frederick Billings of Woodstock and was erected in 1885.

WILLIAMS SCIENCE HALL: Completed in 1896, this building was one of the first completely fireproof buildings in the country. It was given to the University by the late Dr. Edward H. Williams of Philadelphia. Facilities for the Departments of Chemistry, Physics, Zoology, and Botany are housed here, in addition to the Pringle Herbarium, one of the largest collections of its kind in America.

OLD COLLEGE BUILDING: "The Old Mill," as it is popularly known, is the oldest building on the campus and stands on the site of the first college edifice which was erected in 1801. The cornerstone of this structure was laid by General Lafayette. The three parts of this building are sometimes called, respectively, "North College," "Middle College," and "South College." Classrooms and offices for the Department of Economics and the Department of Political Science are located in North College.

GYMNASIUM: The gymnasium and cage provide facilities for the men's athletic activities and also for the Department of Military Science and Tactics. The gymnasium is also used for large dances, social gatherings, and final examinations.

MORRILL HALL: This building was erected by the State in honor of Justin Smith Morrill, for many years a representative and senator from Vermont. As the author of the "Morrill Act," which became law with President Lincoln's signature in 1862, he became the father of the land-grant colleges and universities of the United States. This building, erected in 1906, provides classroom space and offices for the College of Agriculture.

GRASSMOUNT: This fine old colonial mansion with spacious rooms was formerly the home of Governor Cornelius P. Van Ness. Many famous people have been entertained here including General Lafayette, whose statue adorns the campus. For many years, Grassmount has been a dormitory for women.

University Buildings

WASSON MEMORIAL INFIRMARY: In October, 1945, in the Wheeler House adjoining the main campus, the Wasson Memorial Infirmary with a complete staff and equipment was opened. There are facilities for examining entering students, general health service, and infirmary care for such illnesses as do not require hospital service.

WATERMAN MEMORIAL: Planned as a University Center, the Charles Winfield and Anna R. Waterman Memorial was built from the large estate given to the University by the Honorable Charles W. Waterman of Denver, Colorado. It was completed in 1941. On the main floor are found most of the University's administrative offices. On the floor below are located the University Store, the Cafeteria, and the Student Lounge. In the basement are bowling alleys, and Electrical and Mechanical Engineering Laboratories. The second and third floors are devoted to classrooms, laboratories, offices, and study halls.

MEDICAL BUILDING: The College of Medicine is housed in a modern three-story structure located on the north side of the College Green. It contains laboratories, large lecture halls, recitation rooms, and administrative offices in addition to the pathological and anatomical museums. The Medical Library, a division of the University Libraries, is on the second floor. Adjacent to the campus are the Mary Fletcher Hospital, the Bishop DeGoesbriand Hospital, and the State Department of Public Health Building; the facilities of all these are utilized by the College of Medicine.

MUSIC BUILDING: The Department of Music carries on most of its instruction in this remodeled residence just off the main campus. In addition to classrooms, listening rooms, and practice rooms, this building houses the Carnegie College Music Collection.

The following buildings are located on or near the East Campus.

FLEMING MUSEUM: The Robert Hull Fleming Museum was given by James B. Wilbur, Miss Katherine Wolcott (a niece of Mr. Fleming) and six other friends of the University. The exhibition rooms contain collections in geology, mineralogy, paleontology, zoology, and archaeology. The art collections include examples of all types of artistic creation from the ancient period to the modern.

The seismograph station is located in an underground vault connected with the Museum. Observations are sent regularly to the Coast and Geodetic Survey at Washington.

ENGINEERING BUILDING: Erected in 1891, the Engineering Building houses classrooms for mathematics and laboratories for civil and mechanical engineering. Recently the machine shop has been remodeled and \$100,000 worth of machine tools have been added.

ART CENTER: Just back of the Ira Allen Chapel is the center for art instruction. Classes in arts and crafts and in painting are held here. The private studio of the resident artist is also located in this building.

EAST HALL: Originally a naval hospital, this building was obtained from the Federal Government in 1947, moved to the East Campus in sections, and reconstructed. It contains ten large classrooms, a geology laboratory, a civil engineering laboratory, a library reference reading room, private offices for the English Department, and a student lounge.

HILLS AGRICULTURAL SCIENCE BUILDING: On October 16, 1948, Dean Joseph Lawrence Hills, at the age of 87, turned the first shovel of earth for a new building named in his honor. Completed in 1950, it contains facilities for several departments in the College of Agriculture.

DAIRY SCIENCE BUILDING: The new Dairy Science Building, dedicated in October, 1949, houses the equipment, laboratories, and facilities for all aspects of dairy manufacturing, processing, and merchandising. A dairy sales room is included. The building also houses the staff for research, extension, teaching, and related services in the field of dairying.

AGRICULTURAL ENGINEERING BUILDING: Currently being equipped, this building was constructed to house the instructional and research activities of the Agricultural Engineering Department.

UNIVERSITY FARM BUILDINGS: Two sets of farm buildings, with storage for feed, machinery, and tools, furnish laboratory facilities for teaching and research. The new poultry plant includes one building for brooding and one for laying birds. Both are used for teaching and research.

BERTHA M. TERRILL HOME ECONOMICS BUILDING: Funds for this building were appropriated by the 1949 legislature. When completed, it will house teaching, research, and extension personnel in Home Economics and will contain classroom and laboratory space.

The following buildings are located on the Redstone Campus:

SOUTHWICK MEMORIAL: The Mabel Louise Southwick Memorial is the center of women's activities. A modern gymnasium and theatre, an attractive ballroom, and several sizable lounges provide facilities for many varied functions. This building, given by Mr. and Mrs. J. L. Southwick in memory of their daughter, was erected in 1936.

GRACE GOODHUE COOLIDGE HALL: This newest dormitory for women is a modern, fireproof unit, housing one hundred and forty-five first and second-year students. It adjoins the Southwick Memorial Building with which it is connected by a corridor. It is named in honor of Grace Goodhue Coolidge of the Class of 1898.

The University Libraries

The University Libraries, the largest collection in Vermont, contain more than two hundred thousand books and pamphlets, and a large collection of manuscripts. Organized to serve faculty, student, and extension needs, the Libraries are increased by several thousand volumes a year and by magazines, a large number of which are published abroad. The U. S. Government uses the Library as a depository for its publications, books, pamphlets, and maps.

A staff of nineteen trained members maintains library service for the University and the community daily from 8:00 a.m. to 10:00 p.m. and on Sundays from 2 until 6 p.m.

The University Libraries are housed in various buildings on the campus:

Billings Library contains the working collection of recent or up-to-date volumes, newspapers, magazines, and scholarly journals. The building, the gift of the late Frederick Billings of Woodstock, was designed by H. H. Richardson and erected in 1885. In it is the private library of the late George Perkins Marsh, former resident of Burlington, and one-time U. S. Ambassador to Turkey and to Italy. This is a gentleman's library of the 19th century, rich in philology and European literature.

The Wilbur Library, given by the late James B. Wilbur of Manchester, contains the most extensive collection of Vermont material in existence. The Library is in a well-furnished room in the Fleming Museum, and is supported from an endowment fund.

The Medical Library, in the College of Medicine Building, contains the books and magazines used in an active Medical school.

The Williams Science Hall contains books on chemistry, physics and zoology.

The Waterman Building has shelves for about 75,000 government documents, and old or little used books.

In East Hall is a reserve book room, where students have access to books containing specific assignments from the faculty.

In the winter of 1947 a society of "Library Fellows" was organized, composed of faculty, alumni, and friends of the University who by special contributions, aid the library in carrying on various phases of its work. The society, of more than 100 members, is open to all who are interested in books, knowledge, the advancement of learning, and the improvement of present library facilities.

Living Accommodations

THE WOMEN'S RESIDENCES

All women undergraduate students are required to procure rooms approved by the University. Most freshman women reside in the recently completed Grace Goodhue Coolidge Hall or in South College Hall on the College Green. Other college-owned dormitories, primarily for upper-class women, include Grassmount, Lyman Hall, Redstone Hall, Robinson Hall, Roberts House and Slade Hall. These houses accommodate from twenty-two to thirty-nine women each. Students supply their own bed linen (except mattress pads), blankets, rugs, window curtains, desk lamps, and easy chairs, if desired. Students living in these dormitories obtain their meals either at the Waterman Dining Hall or at the Robinson Dining Hall. Meal contracts for Robinson Dining Hall are required for freshmen and sophomores living on the Redstone Campus, unless other arrangements are approved by the Dean of Women.

Four cooperative houses are owned by the University (Adsit, Allen, and Claggett Houses, and Sanders Hall) where, for a selected group of seventy-eight girls, expenses for board can be reduced by carefully planned low-cost meals, prepared and served by the students themselves under the supervision of the House Director. Participants in this plan are selected on the basis of character, scholarship and relative need, and the privilege is usually limited to a residence of two years. Elmwood Hall and Warner House are privately operated dormitories which are supervised by the University. Excellent meals are served in both houses on a two- or three-meal contract.

Four sorority houses provide room accommodations for sixty-seven upperclass women.

Three private homes, approved by the University, provide kitchenette facilities for thirty-two students wishing to economize by preparing their own meals. In the private houses the householder acts as House Director and the same regulations prevail as in the college units.

In charge of each house and dormitory is a qualified House Director who works closely with the Dean of Women to assure that the highest type of living conditions is maintained. In the larger units the House Director is assisted by a senior or graduate student called the House Fellow.

Those who cannot be accommodated in the dormitories are assigned rooms in approved private homes which are supervised by the University. *No final choice of rooms may be made without the approval of the Dean of Women.* Enrollment is not permitted until this approval is obtained.

Converse Hall, a gift of John Heman Converse, was built of Rutland marble in 1895 on the crest of the elevation on the East Campus. The three sections of this Collegiate-Gothic building enclose three sides of a court which opens to the west. The north and middle sections house about 100 women students, and the south section contains eight apartments for faculty members.

LIVING ACCOMMODATIONS FOR MEN

Chittenden, Buckham, and Wills Halls are three new modern dormitories for men which were constructed on the East Campus in 1947. Each houses 143 students, and all incoming freshman men who do not live locally with their families are assigned to these dormitories.

In the dormitories, a bed, mattress, chest of drawers, wardrobe, desk, and chair are provided for each occupant. Students must supply their own bed linen, blankets, coverlet, towels, desk lamp, rugs, and garment bags. Radios are permitted under certain conditions.

Eleven fraternity houses representing eight national fraternities and three local fraternities provide housing and in some cases dining facilities for approximately 250 upperclass men.

Most men students not boarding at fraternity houses or private homes obtain their meals in the Waterman Dining Hall where good food is served, cafeteria style, at reasonable prices.

HOUSING FOR MARRIED STUDENTS

The University maintains trailers near Centennial Field. Each trailer includes minimum furniture, an oil stove, ice refrigerator, and space heater. Toilet, laundry, shower facilities and water points are centrally located within the colony.

At Fort Ethan Allen, formerly a military post, which is located five miles from the campus, the University maintains facilities for couples in converted barracks. These apartments are furnished with the necessary furniture, including stove and toilet facilities. Regular bus service is available from the gate of the post to the campus. The fare is fifteen cents.

A limited number of furnished and unfurnished apartments are usually available for rent within the city limits of Burlington. Few are available for less than fifty dollars per month.

Personnel Services

HOUSING BUREAU

In Room 140, Waterman Building, the University maintains a Housing Bureau. Questions concerning accommodations for single men and married students should be directed to this office. A list of rooms in private homes is also available here. The University will do all it can to assist students in locating desirable accommodations within the city, but it does not guarantee to meet the specific needs of all. Questions concerning living accommodations for women students should be directed to the Office of the Dean of Women.

HEALTH SERVICES

The University has complete facilities to maintain the physical well-being of members of the student body. The institution provides a Student Health Service and Departments of Physical Education for Men and for Women.

The University Health Service, organized in 1941, has its headquarters at the Wasson Memorial Infirmary. The service includes complete physical examinations on all incoming students, the examination of members of athletic squads, care of injuries, advice on all health and medical problems. It is staffed by a Director of Infirmary Service, a Medical Director and associate physicians who hold regular office hours in the Infirmary, and are on call for emergencies. A resident psychiatrist and a visiting orthopedic surgeon are available for consultations. Registered nurses are on duty at all hours. A student may employ a private physician using the facilities of the Infirmary if desired. Cases of serious illness are sent to one of the two modern, well-equipped hospitals which are adjacent to the campus. Parents are notified of the student's illness by letter or telephone depending on the nature of the illness.

The Infirmary at present operates under the following regulations:

1. Every student who pays full tuition for the normal college year of nine months is entitled to a maximum of five days of free infirmary care and such routine medical care as is needed and as the Infirmary and Health Service can render during the nine months' period.
2. Students who require infirmary care for more than five days in the college year are charged therefor at the rate of \$5.00 per day.

Every student at the University is required to participate in the Physical Education program for two years. Normally this work is taken in the freshman and sophomore years, but may be postponed on the advice and authorization of Medical Director, or the student's own physician.

STUDENT PERSONNEL OFFICE

The Office of the Director of Student Personnel, 104 Waterman Building, provides the following services gratis for students and alumni:

COUNSELING: Confidential and objective help is available to students in the solution of personal, social, academic, and vocational problems which, if neglected, might hinder scholastic or professional success. The facilities of the Student Personnel Office include the services of a psychiatrist. Aptitude, interest, and achievement tests are used in the counseling program. Carefully selected upper class students function as counselors in the men's dormitories under the supervision of the Director of Student Personnel.

STUDENT EMPLOYMENT: A Student Employment Bureau is maintained to assist any student enrolled in the University in securing either regular or occasional part-time work. The University employs a number of students in the college buildings, the dormitories, the cafeteria, and the academic departments. Opportunities are available in homes, industrial and business establishments in Burlington. Students are advised to seek employment only in instances of definite financial need and provided they have reason to believe they can carry successfully a normal college program at the same time. Wives of students are also assisted.

PLACEMENT: The University maintains a placement service for seniors and alumni. In his senior year each student may file his credentials with the Placement Bureau, which brings available positions to the attention of qualified candidates and also arranges for campus interviews with visiting personnel representatives from various industries, business organizations, and school systems. Confidential credential folders are prepared for each registrant. Booklets and pamphlets containing vocational information about the business and professional world as well as service with the U. S. Government are on file. A Job Clinic is held annually providing an opportunity for first-hand discussion with experienced men and women concerning employment opportunities, professional requirements, and the technique of seeking a position.

VETERANS' EDUCATION OFFICE

The office of Director of Veterans' Education was established to cooperate with the Veterans Administration in enrolling and advising veterans with their educational problems. Requests for information concerning educational benefits should be addressed to the applicant's local or regional Veterans Administration office. Requests for information concerning enrollment as a veteran at the University should be addressed to the Director of Veterans' Education, Waterman Building.

Student Life

The University officially recognizes the activities of a large number of organizations in caring for the social and recreational needs of students, developing their cultural and religious interests, providing them with valuable business and executive experience, and broadening their contact with the public, with their fellow students, and with the educational world. Because it is within this area that qualities of leadership are developed, the University encourages the widest possible participation consistent with its scholastic requirements.

Each student organization must have the approval of the University Council and remains subject to its jurisdiction. Although the University Council issues regulations to govern student activities, a good deal of authority has been delegated to student organizations.

A committee known as the Student Advisory Committee and composed of officers of instruction and administration is concerned with the system of student organizations and activities, with University policy relative to student organizations, and, in general, with the relationships between the University and these organizations. The Committee engages in studies relative to these matters and forwards recommendations to the University Council, the University Senate, the organization advisers, or the organizations, as appropriate.

RELIGIOUS LIFE

The University, although not affiliated with any denominational body, provides a rich program of religious activities. Formal courses of instruction are offered in the College of Arts and Sciences in the History of Religion and in the Old and New Testaments.

All religious activities on the campus are coordinated by a Committee on Religious Life, composed jointly of students and faculty members, representing different faiths. Headquarters are in the Waterman Building, which is the office of the Executive Secretary. The Committee sponsors the University's religious services, including a weekly chapel service and occasional vesper services on Sundays; it serves to coordinate the activities of the student associations devoted to religious and social service programs, such as the Student Christian Association, the Newman Club for Catholic students, the Hillel Foundation for Jewish students, and the several Protestant denominational groups. Inter-denominational and inter-faith meetings are held, with speakers of national reputation as guests. The several churches in Burlington are delighted to welcome University students and cooperate with the Committee on Religious Life in sponsoring many student activities.

U.V.M. STUDENT GOVERNMENT

During the year 1949-1950, the students of the University adopted a constitution establishing the U.V.M. Student Association. This new constitution actually reorganized a system of student government which had existed for several years through an association called the U.V.M. Students. A constitutional revision committee of the student government council conducted a thorough study and prepared a draft which was revised in the course of discussions in open hearings, debate during the proceedings of a constitutional convention of the student body, and conversations with University authorities. It is an aim of the U.V.M. Student Association to work for a maximum of cooperation among students, faculty members, and administrative personnel in the conduct of all campus activities.

All students enrolled in the undergraduate colleges and schools of the University are members of this organization on payment of the Student Activity Fee. Members of the Student Association elect a president, a vice-president, a secretary, a sub-secretary, a treasurer, and a sub-treasurer, at large. The Student Association Council consists of the officers and councilmen. The latter are elected on the basis of class representation.

Although the regular business of the Student Association is conducted by the Council and its members, the Council may convoke the members of the association for the purpose of holding a referendum or conducting some other extraordinary business. Students may take the initiative in calling a mass meeting. The Student Association Council holds weekly meetings during the academic year.

A great deal of the work of the Student Association Council is performed by its standing committees: the Cultural, Election, Financial, Orientation, Pep, Religious Life, and Social committees. The Council elects one of its members to serve on each of these committees. Members of the Student Association, other than officers and councilmen, have an opportunity to participate in student government through membership on the committees.

The Student Court is the judicial agency of the U. V. M. Student Association and consists of representatives of each of the undergraduate colleges and schools. It has exclusive jurisdiction in all cases concerning the interpretation of the Constitution and By-Laws of the Association, it has original jurisdiction in cases involving violations of University regulations and violations of Student Association rules, and it has some appellate jurisdiction.

WOMEN'S STUDENT GOVERNMENT ASSOCIATION

Every woman who enrolls as a student at the University, unless she is a resident of Burlington and living with her parents or guardian, automatically becomes a member of the Women's Student Government Association and is thereafter subject to its authority. This organization regulates those matters of student conduct which are not academic in nature.* By distributing responsibility and encouraging participation in its activities W. S. G. A. aims to develop individual leadership and to encourage self-direction. A social conscience and high ideals of personal integrity are promoted through the Honor Code. Cooperation based upon a thorough understanding of the rules and regulations of the Association is expected of each student.

W. S. G. A. mass meetings are held at stated intervals. All women students are required to attend these mass meetings, as in no other way can they keep in touch with matters with which student government is concerned. The W. S. G. A. Council, which is the Executive Committee composed of W. S. G. A. officers, meets weekly. The Joint Conference Committee, composed of faculty members and students, meets twice each semester as an open forum for discussion of policies and regulations, and to advise the W. S. G. A. Council.

HONORARY SOCIETIES

The Boulder Society, a self-perpetuating group of senior men, is recognized as an organization responsible for student leadership. Election to this society is counted one of the highest honors that a University man may win. A feature of each Founder's Day is a meeting of this organization at which time the names of new members are announced.

Other honorary class societies for men that are active on the Campus are Key and Serpent, a junior society; Gold Key, a sophomore society; and Cap and Skull, the senior medical society.

Mortar Board, national senior honorary society for women, has an active chapter at the University. By such an affiliation women at Vermont are brought in closer contact with outstanding college women throughout the country while they still maintain their local significance of service to the Vermont campus. Though membership in Mortar Board comes as the greatest honor for a Vermont woman in recognition of outstanding service, scholarship, and leadership, it is far more than an honor. It is much rather a challenge for continued sound and honest scholarship, for unselfish service in the best interests of the college campus, and for the finest type of womanhood.

* For details, refer to W. S. G. A. *Handbook*.

In 1938 two honorary class societies for women were organized. The junior society, Staff and Sandal, has twelve members, elected by the junior class from its outstanding leaders. The Sophomore Aides, fifteen in number, are elected annually by the sophomore class from those who in their freshman year gave evidence of the qualities of scholarship, leadership, and service. The members serve as assistants to Mortar Board.

The Phi Beta Kappa Society established the Vermont Alpha Chapter at the University in 1848. Election of seniors is made in December and at Commencement. The initiates are chosen primarily on the basis of high scholastic standing. The local chapter was the first in Phi Beta Kappa to initiate women into membership.

The Society of the Sigma Xi established the Vermont Chapter at the University in 1945. The initiates are chosen on the basis of proven ability to do research in one of the various sciences, and in the case of students high scholastic standing. Elections of faculty, graduate and undergraduate students are made in the second semester.

Other national honorary societies include Alpha Zeta, agriculture; Kappa Phi Kappa, education; Omicron Nu, home economics; and Tau Kappa Alpha, debating. Ethan Allen Rifles is a local honor society for outstanding students in the Reserve Officers Training Corps.

INTERCOLLEGIATE ATHLETICS AND OTHER SPORTS

The Physical Education activities for men are carried on in the University Gymnasium, the baseball cage, and on playing fields adjoining. The Physical Education activities for women are centered in the Southwick Memorial Building on the Redstone Campus and upon the playing fields nearby. A number of tennis courts are provided for the use of all students. Skiing privileges are available on the college campus and also on Mt. Mansfield.

A program of intercollegiate competition is maintained in football, skiing, hockey, baseball, basketball, track, cross-country running, tennis, and golf marksmanship. The athletic policies of the University are under the direction of the Athletic Council, composed of members of the faculty, the student body, and alumni. Athletic relations are maintained with colleges and universities in New England and the eastern seaboard in all the sports mentioned above. The athletic teams are under the direction of a corps of experienced coaches. The University is a member of the "Yankee Conference," which is composed of the land-grant colleges and universities in New England, and of the National Collegiate Athletic Association, the New England Intercollegiate Athletic Association, and the Eastern Intercollegiate Athletic Association.

The Varsity Club, composed of men who have earned their "V," meet all visiting athletic teams and work for the general development of athletics at the University.

A Sailing Club was organized in 1949, under the Men's Athletic Council, for those students interested in developing a program of competition. A small Angler's Society expanded its scope of activities in 1950 and is now called the U.V.M. Rod and Gun Club.

The Women's Athletic Association sponsors a large number of activities for women students including archery, badminton, basketball, field hockey, folk dancing, life saving, modern dancing, ping-pong, skiing, skating, swimming, tennis, and volley ball. In collaboration with the Modern Dance Workshop, it also sponsors the annual Lilac Day program in the spring. There is also an All Sports Club for women students.

Intercollegiate competition of women students is restricted to such activities as skiing. These activities are under the jurisdiction of a Women's Athletic Council.

In addition, the Outing Club sponsors for both men and women students mountain climbing expeditions, ski trips, and other outdoor activities.

FRATERNITIES AND SORORITIES

Approximately 800 men and 375 women are members of thirteen undergraduate fraternities and nine sororities on the campus. These groups provide additional social experience for their members in the form of dances, spreads, intramural athletics, interfraternity sings, social work, house operation and meal service, and chapter meetings. Fraternity activities are coordinated by an Interfraternity Council and sorority activities are coordinated by a Pan-Hellenic Association.

Active chapters on this campus include the following:

Fraternities

Acacia
Alpha Tau Omega
Chi Sigma Zeta
Delta Psi
Kappa Sigma
Lambda Iota
Phi Delta Theta
Phi Sigma Delta
Sigma Alpha Epsilon
Sigma Nu
Sigma Phi
Sigma Phi Epsilon
Tau Epsilon Phi

Sororities

Alpha Epsilon Phi
Alpha Chi Omega
Beta Chi Alpha
Delta Delta Delta
Delta Phi Epsilon
Gamma Phi Beta
Kappa Alpha Theta
Pi Beta Phi
Sigma Gamma

KAKE WALK

The outstanding social event of the year is the Kake Walk week-end in February. This unique celebration is UVM's gala occasion and many returning alumni attend annually. Festivities include a formal ball at which a king and queen are crowned, snow sculpture, and athletic events. For two nights, the fraternities compete with one another in original skits and in the art of *Walkin' fo' de Kake*. Prizes include cups and many beautifully decorated cakes. The events of the week-end are under the general supervision of the Interfraternity Council.

THE VIPS

A very active Vermont Independent Party provides similar types of experiences for a large number of students of both sexes for whom the fraternity system does not hold a strong appeal.

MUSICAL ACTIVITIES

Opportunities for participation and appreciation are provided for those students with strong musical interests. The University Choir, the University Orchestra, and the University Band appear in public presentations many times during the year. Vesper services, Christmas and Easter concerts, and a Spring Operetta are regular events. Many other concerts and recitals are sponsored by the Department of Music. The UVM Music Club and the Men's Chorus provide students with other opportunities for participation in musical activities.

DRAMATICS, DEBATING AND RADIO

The Department of Speech sponsors many activities in the field of dramatics and debating. The Dramatic Club presents several productions of high quality each year in addition to the Vermont Varieties, an annual show which includes members of the faculty, staff, and student body. Membership in the club is gained through participation in the productions and is open to all students.

The debate teams of the Lawrence Debate Club have made an enviable national record. Each fall the University is host approximately to sixty colleges which send two or more teams to participate in this annual tournament. During the year members of the club appear before service clubs and other groups throughout the State of Vermont.

Opportunities for those interested in the several aspects of radio broadcasting are available through the activities of the Radio Workshop.

STUDENT PUBLICATIONS

Those interested in journalism and editorial work find opportunity for expression in a number of student publications. The *Vermont Cynic* is the student newspaper which is published weekly or oftener. The *Ariel* is the annual yearbook which is published by the members of each class during their senior year. Each year, a student group known as the Scribes publishes two issues of *Windfall*, a literary magazine, and a committee from Student Council prepares the annual *Freshman Handbook* for incoming students.

CLASS ORGANIZATIONS

The members of each freshman class form a class organization which retains its identity throughout the undergraduate years of its members and extends through subsequent years as long as there are living alumni of the class. Members of each undergraduate class elect officers each spring, except that officers elected at the end of the junior year serve through the senior year and also to the end of the first reunion. During the junior year, each class sponsors the annual *Junior Week*, which includes the traditional *Peerade* of floats. Each senior class conducts the events in the traditional *Senior Week*.

OTHER STUDENT ORGANIZATIONS

Many other groups and activities, sponsored by departments and special groups, include the following:

Aggie Club
American Society of Agricultural
Engineers
American Society of Civil
Engineers
American Institute of Electrical
Engineers
American Society of Mechanical
Engineers
Bertha Terrill Home Economics
Club
Campus 4-H Club
Flying Club
Future Farmers of America
Goodrich Classical Club
Graduate Club

International Relations Club
John Dewey Club
Le Cercle Français
Marketing Club
Nursing Club
Osler Clinical Society
Poultry Club
Round Table
Sheldon Club (Summer Session)
Spanish Club
Surgeons of the Long and Short
Robes
Trailer Colony
Women's Health Council
Young Republican Club

The Admission of Students

THE UNDERGRADUATE COLLEGES

The University of Vermont and State Agricultural College desires to admit students of high character and serious purpose who are qualified to do college work. It seeks as much information as possible about a student before his application is considered. A composite estimate of his capacity to profit by college work is formed from the following items.

1. The recommendation of the school principal
2. The candidate's rank in his graduating class
3. The school record of courses completed
4. Such tests as may be required by the Director of Admissions
5. A personal interview, if required by the Director of Admissions

Of these five items no one is considered as all important in itself. The important thing is the composite picture which results from the combined evidence from them all.

The information collected in connection with a student's application has another distinct value. It is used by the student's personal advisor in guiding the choice of a curriculum and of particular courses. Since education is a continuous process, the University hopes to receive all possible information from the high school for use in planning the college course best adapted to the individual.

Each college of the University desires that its students present a well integrated course of preparation, including certain subjects which it regards as especially desirable. These subjects are not absolutely required, but rather suggested to the high school student and advisor as suitable preparation for college work. Other qualifications being equal, preference is given to those who present the subjects which are deemed especially desirable.

Students will be admitted without any entrance conditions, except in subjects which are prerequisite to courses required in their respective curricula.

Application forms for admission to the University of Vermont and State Agricultural College will be sent upon request. Since the number of rooming accommodations available is limited, it is wise for a candidate for admission to submit his application and credentials as early as possible after the first of February in the year in which admission is sought. Action on applications will be taken in April and notification will be sent

to the students early in May. Inquiries should be addressed to the Director of Admissions, Waterman Building, University of Vermont and State Agricultural College, Burlington, Vermont.

COLLEGE OF ARTS AND SCIENCES

Graduation from secondary school normally implies the completion of at least sixteen credits, and this is regarded as the usual requirement for admission. The College of Arts and Sciences recommends that candidates complete the following courses: English (4 years), ancient or modern foreign language (2 years), elementary algebra, plane geometry, history, and science. Additional subjects should be chosen so far as possible in the fields of language, mathematics, and history. For those who intend to take pre-medical or pre-dental work or to concentrate in the sciences a second year of algebra is highly desirable.

COLLEGE OF TECHNOLOGY

The College of Technology recommends that candidates for admission to the curricula in Engineering complete the following secondary school courses: English (4 years), algebra (elementary and intermediate), plane geometry, solid geometry, history, and science. Superior students may be accepted without intermediate algebra or solid geometry, or both, but must enroll in a special course.

In addition to the eight or eight and a half units listed above the candidate is advised to choose the remaining units as far as possible in the fields of language, mathematics, history, and science.

Candidates for admission to the Economics and Chemistry Curricula should follow the recommendations for the College of Arts and Sciences above. For the Chemistry Curriculum, solid geometry is desirable.

COLLEGE OF AGRICULTURE

Courses considered especially desirable for prospective students in Agriculture are: English (4 years), elementary algebra, plane geometry, and science (2 years). History and a third year of mathematics are also desirable.

Courses considered especially desirable for prospective students in Home Economics are: English (4 years), foreign language (2 years of one language), elementary algebra, plane geometry, history, and science (2 years). A third year of mathematics is also desirable.

COLLEGE OF EDUCATION AND NURSING

The College of Education and Nursing recommends that candidates for admission complete the following courses in secondary school: English

(4 years), ancient or modern foreign language (2 years), algebra (elementary), plane geometry, history, and science. Candidates should present additional subjects as far as possible in the fields of language, mathematics, and history. In certain curricula they may receive admission credit for commercial subjects, home economics, manual training, or agriculture, if they have maintained a sufficiently high scholastic record.

For admission to the curricula in Elementary Education and Junior High School Education see Index under "Admission, Elementary Education," or "Admission, Junior High School Education."

SCHOOL OF DENTAL HYGIENE

Enrollment in this School is limited to women who are high school graduates and are otherwise eligible to enter the freshman class of the University.

SPECIAL AND UNCLASSIFIED STUDENTS

Subject to the usual entrance requirements of the University, persons who are qualified for regular admission may, on payment of specified fees, pursue certain studies in regular college classes as special or unclassified students. This arrangement is intended to accommodate those whose previous study and attainments enable them to pursue with profit special courses of study in particular departments. Students who have been dismissed for low scholarship may not re-enter as special students.

Special students are those who are not candidates for a degree in one of the regular curricula, or who are carrying less than a normal academic load. Unclassified students are those who are not considered members of one of the four regular classes.

Such students are registered and enrolled in the same manner as regular students, and are subject to all regulations of the University. Credit for courses completed may be subsequently counted toward a degree. Special students are not eligible to hold University scholarships.

PRELIMINARY REGISTRATION PROGRAM

The days immediately preceding the opening of class work are devoted to certain preliminary events designed to facilitate the adjustment of freshmen to conditions of life and study at college. The full schedule of events is given in a special circular, *Program of Preliminary Days at U. V. M.*, which is sent to all prospective freshmen by the Admissions Office one month before the opening of college.

All new students are given scholastic aptitude tests at the opening of the college year. Freshmen also take several placement tests on the basis of which some students are placed in more advanced courses. The scores on all tests are used in advising students regarding the course of study to pursue, and vocational plans. A personal data report, physical examination, and registration photograph are also included in the program.

ADMISSION TO ADVANCED STANDING

All applicants for admission who have attended another collegiate institution are required to file with the Admissions Office an official transcript of the college record together with a statement of honorable dismissal.

A student who transfers to the University from another accredited college or university may be given provisional credit by the Registrar for all courses satisfactorily completed, provided that similar courses are counted toward graduation at the University of Vermont. Transfer credit is not allowed for work completed with grade "D" or its equivalent, unless a more advanced course in the same subject has been passed with a higher grade in the institution from which the student transfers.

The credit is provisional, pending satisfactory completion of a semester's work at the University. If the student is in good standing at the end of his first semester, the transfer credits are fully granted. If, however, he is under warning, the departments concerned review the credits and report to the Committee on Admissions who then decide what credits will be allowed. Re-evaluation is rarely permitted once the credits have been finally determined.

ENROLLMENT

Every student is required to register and enroll on the designated days. All charges for the ensuing semester must be paid, or otherwise provided for, before enrollment is completed. Directions for enrollment are published for each semester.

After enrollment, no changes of studies will be allowed except such as are authorized by the Dean of the college of the University in which the student is registered. After Saturday of the first full week of the semester no enrollment or changes of studies will be permitted, except that a student may drop a course with his Dean's permission during the first three weeks of a semester without incurring any academic penalty.

COLLEGE ENTRANCE EXAMINATIONS

The College Entrance Examination Board will administer a series of tests during 1951 on the following dates: January 13, March 10, May 19, and August 15.

Complete information may be obtained from the College Entrance Examination Board, P. O. Box 592, Princeton, N. J.

The University does not require that applicants take College Entrance Examinations but recommends that they be used to support applications for admission.

Student Expenses

The student expenses outlined in the following paragraphs are the anticipated charges for the academic year 1951-52. *Changing costs, however, may require an adjustment of these charges.*

TUITION: The tuition charges per semester are in accordance with the following schedule. These charges include health, infirmary, physical education and laboratory fees. However, refundable deposits may be required to cover loss or breakage in certain departments. Additional charges are made for individual lessons in music and for some expenses in the course in Dental Hygiene.

	<i>Residents</i>	<i>Non-residents</i>
Agriculture (see also below).....	\$112.50	\$262.50
Education and Nursing (excluding Elementary and Junior High School Education) ..	212.50	262.50
Elementary Education and Junior High School Education (see also below)	none	262.50
Arts and Sciences, Technology.....	212.50	262.50
Dental Hygiene	150.00	225.00
Medicine	275.00	350.00
Graduate Students (per hour).....	14.00	17.50
Special Students (per hour).....	18.00	22.00

DEFINITION OF A "RESIDENT STUDENT." For the purpose of determining the tuition to be paid, the Board of Trustees has adopted the following definition: "The term 'resident student' shall include only the following: (a) a minor student whose regular home is with a parent who has been domiciled in the State of Vermont for at least the preceding year; (b) a student of legal age who has himself been domiciled in the State of Vermont for at least the year preceding college matriculation."

COLLEGE OF AGRICULTURE. In the College of Agriculture the tuition charge for regular, undergraduate students who are residents of Vermont is reduced through a tuition scholarship of \$200.00 per academic year granted such students by the State. The State enactment also provides that "any student transferring from courses in agriculture and home economics to other courses within the University, or to another educational institution, shall refund to the treasurer of the University any sums which have been received as scholarships under this section, unless excused therefrom by the president."

EDUCATION AND NURSING. Most resident students in the Elementary Education and Junior High School Education Curricula pay no tuition. For details see Index, under "Fees and Tuitions, Elementary Education."

Student Expenses

SCHOOL OF DENTAL HYGIENE. Under the provisions of State law and by arrangement with State officials, a special tuition fee has been established for students in this School. The tuition fee is \$150.00 per semester for residents of the State of Vermont and \$225.00 per semester for non-resident students.

COLLEGE OF MEDICINE. The tuition fee is \$275 per semester for Vermont residents and \$350 for others. There are fifty State Scholarships of \$100 a year each available to Vermont residents. Students allowed to repeat a year are charged full tuition for that year.

An application fee of \$10 is charged each applicant for admission.

EXCEPTIONAL ENROLLMENTS. For an enrollment of fewer than twelve hours the charge is \$18.00 (\$22.00 for non-residents) per semester hour. The same fee is charged students carrying for credit courses in excess of the normal program in the several curricula. For a special student fifteen hours is considered normal.

With the approval of his Dean and the instructor concerned, a student who is regularly enrolled and carrying a normal program may "audit" a course. In such cases no entry is made on the student's permanent record, no credit is given for the work, and no charge is made.

Students who by reason of conditions over which they have no control require more than four years to complete the requirements for a degree shall be charged no more than the full tuition for four years.

TUITION FOR COURSES IN APPLIED MUSIC: Private lessons are approximately one-half hour in length, fifteen being given in each semester. Students who enroll as regular full-time students in the Music Education curriculum, paying full tuition, are charged one-half the regular rates for applied music for such courses as are required in the curriculum. All others pay the scheduled charges.

PIANO, ORGAN, VIOLIN AND SINGING

One lesson a week.....	\$35.00 per semester
Two lessons a week.....	60.00 per semester
Use of organ one hour a day.....	25.00 per semester

MATRICULATION FEE: A fee of five dollars is required of all new regular session matriculants.

STUDENT ACTIVITY FEE: All students who are enrolled in twelve semester hours or more in the Colleges of Arts and Sciences, of Technology, of Agriculture, and of Education and Nursing are charged a fee of \$7.50 per semester. This fee is assessed, allocated, and controlled by Student Government and covers the support of recognized student organizations

and activities, including subscriptions to the *Vermont Cynic* and the *Ariel*. First-year medical students who enter the College of Medicine after three years in the College of Arts and Sciences are charged this same fee, which includes membership in the Osler Society.

Graduate students, special students, unclassified students, and students in the College of Medicine may, by paying this fee, become entitled to the benefits listed above.

OSLER SOCIETY FEE: All students in the College of Medicine are charged an Osler Club fee of \$3.50 per year.

LATE REGISTRATION FEE: A late registration fee of six dollars is charged students who fail to complete enrollment at the appointed times. In unusual cases, exemption from this charge may be made by the Deans.

CHANGE OF ENROLLMENT FEE: A fee of one dollar is charged, except in the College of Medicine, for any change of enrollment requested by the student concerned. Deans may waive this fee in exceptional cases.

DEGREE FEE: The fee for the Baccalaureate Degree, payable during the semester prior to graduation, is ten dollars; for the Master's Degree, the technical Degrees of C.E., E.E., or M.E., the fee is twenty-five dollars.

REGISTRATION DEPOSIT: A registration deposit of thirty-five dollars is required of every applicant within two weeks after he has received notification of his acceptance as a student of the University. The total amount of this deposit is credited to the student's account on his first semester's bill. In the event that the applicant cancels previous to August 15, fifteen dollars of this amount will be refunded.

BREAKAGE CHARGE: A charge will be made, as recommended by the department or office involved, for excessive or unusual breakage or damage and for breakage or damage of expensive equipment.

ROOM CHARGES: Rooms in college dormitories are rented for the entire year and the prices are uniform in all dormitories. Double rooms are eighty dollars per occupant per semester; single rooms rent for one hundred and two dollars and fifty cents. Nominal charges for the use of certain electrical appliances may be levied upon occupants of the dormitories. The rent for semi-permanent trailers for married couples is twenty-five dollars per month. Furnished apartments at Fort Ethan Allen rent for thirty dollars to forty dollars per month depending on the size and the utilities provided. All are furnished; a few are heated.

BOARD: All freshman and sophomore women who live on Redstone Campus are required to board at Robinson Hall. The current charge is \$157.50 per semester. Most other students, except those living in coopera-

Student Expenses

tive houses or fraternity houses, eat at the Waterman Dining Hall where meals are served cafeteria style. Three well-balanced meals per day may be purchased individually at an approximate cost of \$12.50 per week.

ESTIMATED EXPENSES PER SEMESTER

The following estimates are based on regular tuition for resident undergraduate students. Non-resident students should add \$50.00 and those receiving scholarships or aid from the State should make appropriate deductions.

*Tuition	\$212.50
Student Activity Fee	\$7.50
†Textbooks and Supplies	\$20.00-\$30.00
Room	\$80.00-\$102.50
Board	\$157.50-\$200.00
Average Total	\$500.00

* Not applicable to students in the School of Dental Hygiene.

† Students in the School of Dental Hygiene should expect to stand an expense up to \$150.00 for the year to cover textbooks, laboratory fees, instruments, and uniforms.

PAYMENT OF BILLS

The University does not send bills to students or parents prior to registration. All fees for the semester are assigned at the time of registration and students are expected to present personal checks, travelers checks, or cash at that time. Checks should be made payable to the *University of Vermont and State Agricultural College*. Enrollment is not complete until all charges have been paid or otherwise provided for by arrangements satisfactory to the Treasurer. Students who have not settled their accounts by the end of the semester will not be given official credit for their semester's work.

STUDENT BANK

A student bank is operated by the University and is maintained in the Cashier's Office. Deposits may be sent to the Treasurer or made personally in the Cashier's Office. Withdrawals from these accounts may be made at registration to cover fees assigned or at other times in the Cashier's Office.

REFUNDS

In the event of withdrawal from college, refunds are made as follows:

1. During the first week of any semester the full tuition is refunded. Thereafter 20% of the tuition is deducted for each week that has elapsed.
2. No refund is made of the matriculation or student activity fee.
3. No refund of room rent is made unless a replacement can be found.
4. Refund of board is made on a pro rata basis.

Student Aid

Student fees do not meet the full cost of an education at the University. The income from endowments, State and Federal appropriations, and current gifts furnish the balance, amounting in some courses to a contribution of more than \$2,000 a year toward the education of the student.

Many worthy and deserving students, however, are still unable to meet the existing financial charges and for them the University provides, so far as its resources permit, considerable aid in the form of scholarships, loans, prizes, and employment. Application for student aid should be made to the Student Aid Committee on forms which are available in the offices of the Deans. New students should request forms from the Director of Admissions or from their principal if they are attending a high school in Vermont.

SCHOLARSHIPS

During the past year, a total of \$265,000.00 was awarded to students, including the agricultural, teacher-training, medical, and senatorial scholarships. Of this amount, \$125,000.00 was provided by the University from scholarship endowments and in the form of prizes. Ninety-five percent of the scholarships were awarded to residents of Vermont. There are, however, a number of scholarships available to non-residents including the Alumni Memorial Scholarships for men.

Any student who has received an endowed or current scholarship in consideration of financial need is expected to repay that scholarship should he, at any time prior to graduation, transfer to another institution.

Following is a list of some of the scholarships and prizes available. A complete list of endowed scholarships and loan funds will be found in the appendix.

Alumni Memorial Scholarship Fund. An annual gift from the Alumni Council available for men only. Worthy students who are in need of funds and who meet the qualifications of scholarship, character, leadership, and participation in student activities are recommended to the Student Aid Committee by a special committee of the Alumni Council.

Honor. Two hundred dollars each, for the freshman year only, awarded in each accredited Vermont high school to the highest standing boy and girl eligible for admission to the University.

Prize Contests. In order to encourage student activities in the high schools and preparatory schools of the State of Vermont, the University of Vermont and State Agricultural College conducts annual contests in the following fields:

- a. **DEBATING:** The University is host in the spring of each year to the state debating tournament and awards to the winners of that tournament prizes in the form of scholarships at the University in the amount of two hundred dollars for first place winner, one hundred and twenty-five dollars and seventy-five dollars respectively to the second and third place winners.
- b. **PRIZE SPEAKING:** For many years the University has awarded scholarship prizes to those showing outstanding excellence in a speaking contest held at the University. No such contests have been held recently. However, they will be reinstated in the near future.
- c. **CREATIVE WRITING:** The University awards three one hundred dollar scholarships as prizes for the best entries in the form of short stories, essays, or poems in the annual literary contest.
- d. **EDITORIAL:** The University annually will award three suitable prizes to the three best student newspapers. In judging the newspapers the schools are classified according to size into three divisions and an award made for the best paper in each division.

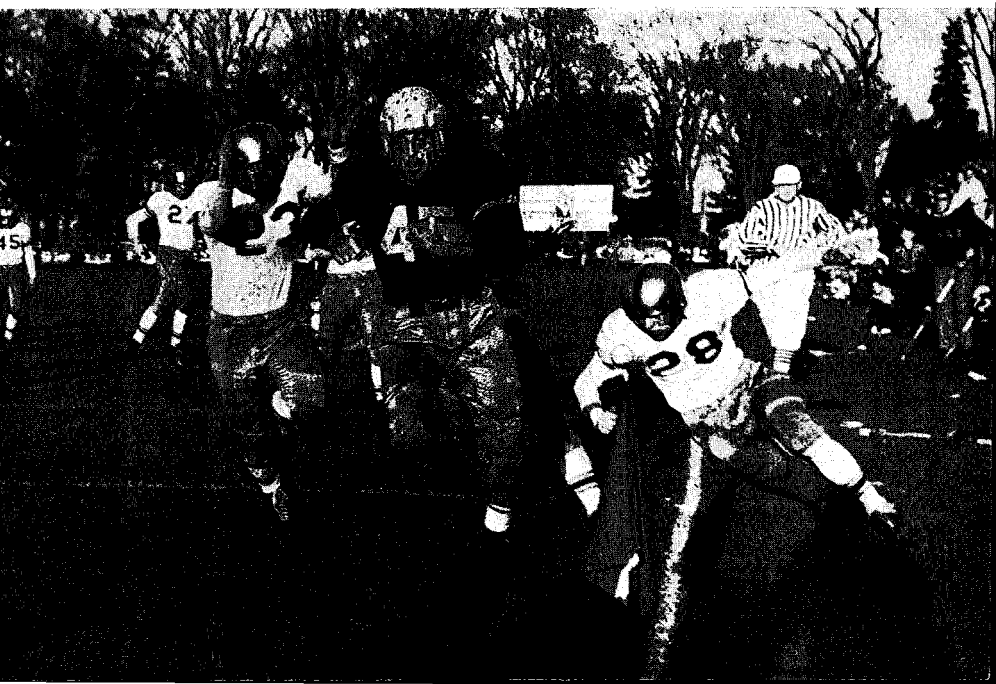
Senatorial. Sixty at \$120 each, for students in the College of Arts and Sciences, the College of Technology, and the School of Education and Nursing, awarded by members of the Vermont Senate. Apply to a senator from your county.

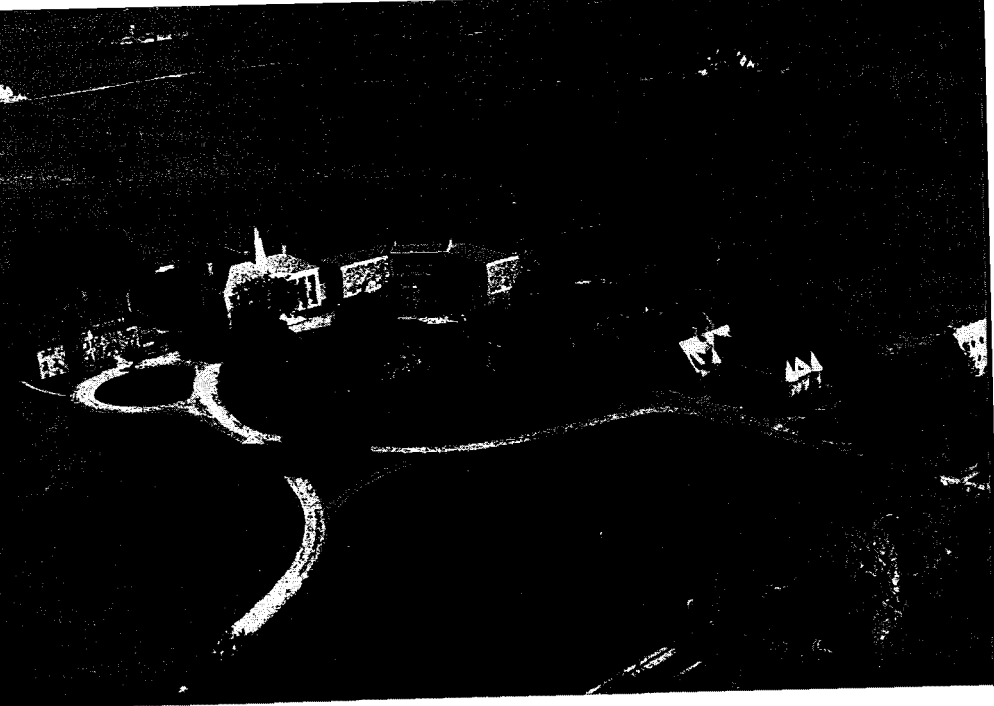
Elementary and Junior High School Education. A limited number of scholarships, varying in amount according to qualifications and need, are



FRESHMAN COEDS AT THE FOUNTAIN ON THE COLLEGE GREEN

UVM TOUCHDOWN





THE REDSTONE CAMPUS FOR WOMEN

SOUTHWICK MEMORIAL BUILDING AND GRACE GOODHUE COOLIDGE HALL



awarded annually by the State Board of Education to students in these two curricula, in addition to the tuition exemption.

Endowed Scholarships. Some are restricted for use of students from certain towns or counties, or from certain schools, or in certain courses, and some are unrestricted as to use.

Wilbur Fund. The income from the fund is available to needy students who are residents of Vermont and who have earned entrance or college records that indicate extraordinary scholastic ability. The amounts awarded vary with individual needs.

LOAN FUNDS

Loan funds are apportioned annually to needy and deserving students, permitting them to pay a part of the cost of college attendance at some future time. The notes are usually repaid during the productive years immediately following graduation.

STUDENT EMPLOYMENT

For details concerning Student Employment, see *Personnel Services*.

General Information

DEGREES

Degrees are conferred on the recommendation of the different Colleges, and specific requirements will be found in the sections devoted to the respective Colleges.

To be eligible for graduation, a student must have attained a grade average of 72 or above in the work required for graduation in his curriculum. Grades in courses accepted for transfer credit are excluded in computing this average.

To be eligible for a degree, a student must have completed eight semesters, or the equivalent in semesters and quarters. Exceptions to this rule may be made in special cases by the University Council.

With the exception noted in the next sentence, every candidate for a degree is required to spend his final year in residence. Those who have completed three years of pre-medical study in the University are awarded their degrees after one year of study in any approved College of Medicine.

The degrees are as follows:

COLLEGE OF ARTS AND SCIENCES

LIBERAL ARTS CURRICULUM: *Bachelor of Arts* (B.A.)

PRE-MEDICAL CURRICULUM (3 YRS.) AND MEDICINE (1 YR.): *Bachelor of Science* (B.S.)

MEDICAL TECHNOLOGY CURRICULUM: *Bachelor of Science in Medical Technology* (B.S. in M.T.)

COLLEGE OF TECHNOLOGY

CHEMISTRY CURRICULUM: *Bachelor of Science in Chemistry* (B.S. in Ch.)

COMMERCE AND ECONOMICS CURRICULUM: *Bachelor of Science in Commerce and Economics* (B.S. in Cm. and Ec.)

CIVIL ENGINEERING CURRICULUM: *Bachelor of Science in Civil Engineering* (B.S. in C.E.)

ELECTRICAL ENGINEERING CURRICULUM: *Bachelor of Science in Electrical Engineering* (B.S. in E.E.)

MANAGEMENT ENGINEERING CURRICULUM: *Bachelor of Science in Management Engineering* (B.S. in Man. E.)

MECHANICAL ENGINEERING CURRICULUM: *Bachelor of Science in Mechanical Engineering* (B.S. in M.E.)

COLLEGE OF AGRICULTURE

AGRICULTURAL CURRICULUM: *Bachelor of Science in Agriculture* (B.S. in Ag.)

AGRICULTURAL ENGINEERING CURRICULUM: *Bachelor of Science in Agricultural Engineering* (B.S. in Ag. Engrg.)

HOME ECONOMICS CURRICULUM: *Bachelor of Science in Home Economics* (B.S. in H.Ec.)

COLLEGE OF EDUCATION AND NURSING

BUSINESS EDUCATION CURRICULUM: *Bachelor of Science in Business Education* (B.S. in Bus. Ed.)

*ELEMENTARY EDUCATION CURRICULUM: *Bachelor of Science in Education* (B.S. in Ed.)

*INDUSTRIAL EDUCATION CURRICULUM: *Bachelor of Science in Education* (B.S. in Ed.)

*JUNIOR HIGH SCHOOL EDUCATION CURRICULUM: *Bachelor of Science in Education* (B.S. in Ed.)

MUSIC EDUCATION CURRICULUM: *Bachelor of Science in Music Education* (B.S. in Mus.Ed.)

SECONDARY EDUCATION CURRICULUM: *Bachelor of Science in Education* (B.S. in Ed.)

NURSING CURRICULUM: *Bachelor of Science in Nursing* (B.S. in N.)

NURSING EDUCATION CURRICULUM: *Bachelor of Science in Nursing Education* (B.S. in N.Ed.)

SCHOOL OF DENTAL HYGIENE

DENTAL HYGIENE CURRICULUM: *Certificate in Dental Hygiene*

GRADUATE STUDY

Master of Arts (M.A.); Master of Arts in Teaching (M.A. in Teaching); Master of Science (M.S.); Master of Education (M.Ed.); Civil Engineer (C.E.); Electrical Engineer (E.E.); Mechanical Engineer (M.E.)

COLLEGE OF MEDICINE

MEDICAL CURRICULUM: *Doctor of Medicine (M.D.)*

* Granted in co-operation with the Vermont State Board of Education.

HONORS

GENERAL HIGH STANDING

The Bachelor's Degree may be conferred "with Honors," by vote of the Senate, in recognition of general high standing in scholarship. Three grades are distinguished and indicated by inscribing on the diploma the words *cum laude*, *magna cum laude*, or *summa cum laude*. In the College of Medicine, the five students who have attained the highest average of marks during the entire four years' course are graduated as Doctors of Medicine, *cum laude*. The names of those who have received these honors and of those who have won prizes will be printed in the Commencement program and in the next annual Catalogue.

SPECIAL HONORS IN THE COLLEGE OF ARTS AND SCIENCES

A student in the College of Arts and Sciences who at the end of his junior year has an average of 85 or above for the work of the sophomore and junior years, may become an applicant for Special Honors in a particular subject. His program for the senior year must be approved not later than the end of the junior year by the department in which Honors are sought and by the Committee on Honors, and he must present a satisfactory thesis and pass an oral examination on the field of special study.

DEANS' LISTS

The Deans of the undergraduate colleges publish at the beginning of each semester the names of those students who have attained an average of at least 85 in their college credit courses during the preceding semester.

GRADING SYSTEM

Scholarship is graded on a percentage scale. Grades are reported and recorded numerically. The minimum passing grade in the undergraduate colleges is 60; any grade lower than 60 represents a failure and indicates that the course must be repeated if credit is to be obtained. A student must obtain an average grade of 72 or above in the work required for graduation in his curriculum, exclusive of grades in courses accepted for transfer credit.

ACADEMIC DISCIPLINE

The continuance of each student upon the rolls of the University, the receipt by him of academic credits, his graduation, and the conferring of any degree or the granting of any certificate are strictly subject to the

disciplinary powers of the University, which is free to cancel his registration at any time on any grounds if it considers such action to be for the welfare of the institution. The disciplinary authority of the University is vested in the President in such cases as he considers proper, and, subject to the reserve powers of the President, in the several Deans.

USE OF ENGLISH

Correct English usage is demanded by all departments in the University. Written work of any kind which is unsatisfactory in manuscript form, grammar, punctuation, spelling, or effectiveness of expression will be penalized, regardless of contents. Students whose written work falls below the standard of correct usage may be remanded to the English Department for additional instruction, even though Freshman English has been passed.

SCHOLASTIC REPORTS

All students enrolled in the undergraduate colleges receive reports of scholarship from the respective Deans' offices after the close of each semester. These reports are also sent by the Recorder to the parent or guardian of each freshman student and to the principal of the secondary school from which he was graduated. Reports of upperclass students are sent to parents only upon request. Special reports of low standing are sent by the Deans' offices about the middle of each semester, both to the students concerned and to the parent or guardian.

In the College of Medicine one report is sent covering the work of the college year.

On leaving the University every former student or graduate may procure one photographic transcript of record without charge. Extra copies may be obtained at a cost of one dollar per copy.

NUMBERING AND DESCRIPTION OF COURSES

A separate number is used for each semester course and for each semester of a year course. The form 1, 2 indicates that the separate semesters may be taken independently for credit, while 1-2 indicates that they may not be so taken and, unless otherwise stated, must be taken in this sequence.

Courses numbered from 100 to 199 are advanced courses, normally open only to juniors and seniors; those numbered from 200 to 299 are for

graduate students only. The letter "G" preceding the course number indicates that the course has been approved by the Director of Graduate Study for credit toward advanced degrees, when taken by graduate students.

The number of credit hours *per semester* for each course is given in italics on the first line of the description, and is followed by Roman numerals indicating the semester or semesters during which it is given in the usual academic year.

In certain departments, a form such as (2-3) immediately follows the course title. This indicates the number of class hours respectively of lecture or recitation and of laboratory for the course. Lecture and recitation periods are fifty minutes in length, laboratory periods at least two class hours or 110 minutes.

Courses are elective, unless otherwise stated, subject to the prerequisites indicated. Prerequisite courses are in the same subject as the courses for which they are required, unless otherwise designated. Rotating and alternating courses show the college year during which they are to be given.

The College of Arts and Sciences

OBJECTIVE

The College of Arts and Sciences aims to provide for young men and women the means and opportunity of fitting themselves intellectually, emotionally, and spiritually to play a responsible part in the world of thought and action.

It devotes itself to the inculcation of ideals and the cultivation of ideas. It seeks to encourage habits of clear, independent thinking and effective expression; to stimulate an appreciative understanding of the thought and achievement of man; to develop sound critical judgment and a spirit of tolerance; to arouse the intellectual curiosity which is the basis of continuing self-education.

Its fundamental purpose is to instill the courage and conviction to exemplify the enduring values of American democracy.

THE LIBERAL ARTS CURRICULUM

The curriculum in Liberal Arts, leading to the degree of Bachelor of Arts, is designed to secure adequate training in language, particularly in English, as the mother tongue and the chief tool of thought and expression, and in certain other subjects essential to an understanding of the various fields of human knowledge; and to provide for further study and mastery of a chosen field of concentration.

Every candidate for this degree must fulfill the requirements stated below, and present a total of 120 semester hours of credit. For those required to take Military Science and Physical Education the total of credit hours shall be increased by the number of hours required in those subjects.

REQUIRED OF ALL STUDENTS:

1. English. English Composition the first year, unless exempted, and the second year either English Literature or American Literature.
2. Foreign Language. One course of at least intermediate grade in French, German, Greek, Latin, or Spanish, to be completed as early as possible in the college career.
3. Science. One laboratory course, normally the first year, to be chosen from Botany, Chemistry, Geology, Physics, and Zoology.
4. Physical Education and Military Science. Two years of Physical Education for men and women, two years of Military Science for men, a year course in Hygiene for women.

5. Field of Concentration. Each student, in consultation with his advisor, must choose a field of concentration during his sophomore year. The specific courses making up the field, as well as the student's whole program for the last two years, are chosen in consultation with the Chairman of the Department in which the major part of the work is to be taken and must have his approval. There are certain restrictions to be met:
 - the field must be a well integrated whole, adapted to the student's special interests;
 - it must include a minimum of six courses totalling not less than 36 semester hours, at least half, but not all, to be taken in one subject;
 - it must contain at least two advanced courses in one subject and one advanced related course in another subject;
 - each student must take at least one course, normally an advanced course, in his field of concentration in each semester of his junior and senior years.

ADDITIONAL REQUIREMENTS FOR STUDENTS CONCENTRATING IN FIELDS IN THE FOLLOWING DIVISIONS:

1. *Language and Literature, or Music: History (American, Ancient, Medieval, or Modern European) normally first year; a second foreign language reaching the intermediate level; a second year course in the Social Science division.
2. Social Science: History (American, Ancient, Medieval, or Modern European) normally the first year; during the first two years a total of two year courses in different departments, chosen from the following: Economics, Philosophy, Political Science, and Psychology.
3. Science and Mathematics: Freshman Mathematics (11, 12) and Calculus (21-22)† the first two years; Inorganic Chemistry† the first year and General Physics† the second year; a total of two year courses in the divisions of Language, Literature, and Fine Arts (including Music) and of the Social Sciences.

* It is strongly recommended by the respective departments that students who wish to choose modern foreign language as their field of concentration complete Intermediate Latin in college unless they presented four years of Latin for entrance. The English Department states that "students concentrating in English will be aided by courses in Latin, particularly if they intend to continue with graduate study."

† Students concentrating in Mathematics may omit Inorganic Chemistry. Those concentrating in Botany or Zoology may omit Calculus and may postpone Chemistry and Physics each one year, beginning their special subject the first year.

PRE-PROFESSIONAL PREPARATION

Students who plan to enter professional colleges requiring previous collegiate preparation should register in the College of Arts and Sciences. The variety of courses offered and the freedom of election in that College is such that all the requirements for any professional school may be met. Many students will desire so to direct their four-year undergraduate course that in addition to a general and sound education appropriate pre-professional training is obtained for later work in the medical sciences, law, or theology.

MEDICAL SCIENCES (MEDICINE, DENTISTRY)

The requirements for admission to an accredited medical college include not less than three years of undergraduate work, during which the courses required by the American Medical Association must be completed.* Any student who wishes to enter medical college should by the beginning of his sophomore year consult the catalogue of the college of his choice and arrange to include in his program courses required by that particular school.

Students will find it definitely to their advantage to plan a four-year program which, in addition to the required courses listed below, includes courses leading to the fulfillment of the requirements for a Bachelor of Arts degree. Those who wish to meet the minimum requirements for admission to medical college follow the first three years of the program below. By successfully completing these three years here and one year in an accredited medical college, they will qualify, on application, as candidates for a Bachelor of Science degree.

In the following outline, courses listed are normally taken in the year indicated. The program may be modified both for the needs of the individual student and to allow for concentration in a particular field. A student must have completed a total of 90 semester hours by the end of the third year to be considered for admission to a medical college.

FIRST YEAR	1st 2nd SEMESTER	SECOND YEAR	1st 2nd SEMESTER
English Composition.....	3 3	English or American Literature..	3 3
Inorganic Chemistry.....	4 4	†Intermediate For. Lang.	3 3
Mathematics	3 3	Quantitative Chemistry	3 3
Zoology	4 4	Physics	5 5
Foreign Language (Elementary or Intermediate).....	3 3	Electives	3-6 3-6
Physical Education	(1) (1)	Physical Education	(1) (1)
Military Science (Men)	2 2	Military Science (Men)	2 2
Hygiene (Women).....	(1) (1)	† Unless already completed.	

* For further information see Index under "Admission, College of Medicine."

THIRD YEAR

 1st 2nd
SEMESTER

FOURTH YEAR

Organic Chemistry	4	4	Courses in field of concentration and electives
Social Science Electives	6	6	
Courses in field of concentration and electives			

The requirements for admission to colleges of dentistry vary but in all cases include at least two years of college work with at least one course each in biology, inorganic chemistry, physics, and English. Hence, the course of study advised as preparation for medicine may be used as a basis for selection by those interested in dentistry.

LAW

American law schools, as a rule, require graduation from a four-year college with a Bachelor's degree prior to admission. There is no prescribed curriculum which is an absolute requisite for admission, but the student is advised to include in his undergraduate course substantial elections in the field of languages, literature, history, economics, political science, and philosophy.

THEOLOGY

Graduation from a four-year college is rapidly becoming prerequisite for admission to most theological seminaries. Although no prescribed curriculum is demanded as preparation for such professional schools, the student is advised to elect substantially from the departments of languages, particularly classics, history, philosophy, psychology, and social studies.

THE MEDICAL TECHNOLOGY CURRICULUM

The curriculum is divided into two parts, the pre-clinical period consisting of three years of work in the College of Arts and Sciences (ninety semester hours) and the clinical period of fifteen months under the supervision of the College of Medicine.

The work of the pre-clinical period is designed to fulfill the basic distribution requirements of the Liberal Arts Curriculum and at the same time give the students a scientific background which will enable them to learn to perform intelligently the highly specialized techniques of the modern diagnostic laboratory. The work of the clinical period consists of learning techniques, taking prescribed courses in the College of Medicine, and practical experience in the laboratories of the teaching hospitals.

The clinical period begins with the summer following completion of the junior year in the College of Arts and Sciences. At the end of eleven months, if the student's work is satisfactory, the degree of Bachelor of Science in Medical Technology is conferred at the regular Commence-

ment exercises. The final four months of the program are devoted to full-time work in the hospital laboratory, at the end of which time the student may be recommended to the Registry of Medical Technologists as eligible to take the examination for certification by that body.

Following is the normal outline of courses:

FIRST YEAR		1st SEMESTER	2nd SEMESTER	SECOND YEAR		1st SEMESTER	2nd SEMESTER
English Composition	3	3		English or American Literature	3	3	
Inorganic Chemistry	4	4		Quantitative Chemistry	4	4	
Zoology (Intro. & Vert.)	4	4		Botany and Microtechnique	4	4	
Freshman Mathematics	3	3		French or German (Elementary or Intermediate)	3	3	
Physical Education	(1)	(1)		Non-science Elective	3	3	
Military Science (Men)	2	2		Physical Education	(1)	(1)	
Hygiene (Women)	(1)	(1)		Military Science (Men)	2	2	
THIRD YEAR		1st SEMESTER	2nd SEMESTER	SUMMER: Basic Techniques		3	hours
Organic Chemistry	4	4		FOURTH YEAR		1st SEMESTER	2nd SEMESTER
*Intermediate French or German	3	3		Special Techniques	5	...	
Zoology (Histology)	4	...		Clinical Pathology	5	...	
Botany (Bacteriology)	3	...		Biochemistry	1	9	
Non-science Electives	6	6		Hospital Assignments	4	2	
				Bacteriology .....	...	7	

* Unless already completed.

COURSES OF INSTRUCTION

ART

Assistant Professor Colburn; Professor Kent; Mrs. Mills

HISTORY OF ART

1 GREEK ART.

Three hours. II

The history of art in Greek lands through the Greco-Roman period, with emphasis on sculpture and architecture and some attention to vase-painting. The aim is to help the student understand the meaning of art and appreciate some of the masterpieces.

Prerequisite: sophomore standing.

Mr. Kent

4 MODERN ART.

Three hours. II

Study and appreciation of contemporary trends in sculpture, architecture, and painting from the period of Impressionism through Surrealism, with emphasis on French and American influences.

Prerequisite: sophomore standing.

Mrs. Mills

ARTS AND CRAFTS**11, 12 ARTS AND CRAFTS.***Three hours. I, II*

Experiences in functional design using various media to develop good taste and creative ability. Different processes including leather tooling, block-printing, ceramics, and work with metal are presented. A weekly lecture period relates the history and appreciation of arts and crafts to student work.

Prerequisite: sophomore standing.

*Mrs. Mills***DRAWING AND PAINTING****21, 22 DRAWING AND PAINTING.****Two or three hours. I, II*

Composition and painting techniques, with emphasis on a clearer understanding of modern schools of painting and on individual development.

*Mr. Colburn***ART EDUCATION**

For courses in ART EDUCATION, see Elementary Education 4-5, 101.

BOTANY

For courses in BOTANY, see the College of Agriculture.

CHEMISTRY

For courses in CHEMISTRY, see the College of Technology.

CLASSICAL LANGUAGES

Professors Kent and Kidder; Associate Professor Pooley; Assistant Professor Turner

SPECIAL REQUIREMENTS FOR CONCENTRATION IN GREEK: Satisfactory completion of twenty-four semester hours, twelve of which must be in courses numbered above 100, and one advanced related course (at least six semester hours).

SPECIAL REQUIREMENTS FOR CONCENTRATION IN LATIN: Satisfactory completion of twenty-four semester hours, twelve of which must be in courses numbered above 100, and one advanced related course (at least six semester hours). Courses in Greek are strongly recommended, particularly to those who contemplate graduate work in Classics.

* This course may not be taken for credit by freshmen. Others may take it for credit once or twice, and in exceptional cases a third time by permission of the instructor and the Committee on Studies. To receive credit a student must complete at least three semester hours.

GREEK

1-2 ELEMENTARY GREEK.

Four hours. I, II

The essentials of Classical Attic Greek. Regular prose compositions and selected readings from various Greek authors.

Mr. Pooley

11-12 INTERMEDIATE GREEK.

Three hours. I, II

Plato's *Euthyphro* and *Apology*; selections from the *Iliad* and the *Odyssey*.

Prerequisite: 1-2 or its equivalent.

Mr. Turner

G101 GREEK ORATORS.

Three hours. I

Reading of selected speeches of Lysias and Demosthenes. Lectures on the ancient canons of rhetoric and their application. (Offered in alternate years, 1952-53.)

Prerequisite: 11-12.

G102 GREEK COMEDY.

Three hours. II

Two plays of Aristophanes. (Offered in alternate years, 1952-53.)

Prerequisite: 11-12.

G103 GREEK HISTORIANS.

Three hours. I

Thucydides, Books I and II. Selections from Herodotus and from Xenophon's *Hellenica*. (Offered in alternate years, 1951-52.)

Prerequisite: 11-12.

Mr. Kent

G104 GREEK TRAGEDY.

Three hours. II

Sophocles' *Antigone* and Euripides' *Medea*, or two equivalent plays. (Offered in alternate years, 1951-52.)

Prerequisite: 11-12.

Mr. Kent

For GREEK ART, see History of Art 1.

For GREEK LITERATURE IN TRANSLATION, see General Literature 1.

For GREEK PHILOSOPHY, see Philosophy 107.

LATIN

1-2 ELEMENTARY LATIN.

Three hours. I, II

The essentials of Ciceronian Latin. Regular prose exercises and selected readings from Caesar. For students who present less than two years of high-school Latin.* *Credit is allowed only if Latin 11-12 is also completed.*

Mr. Turner

* Students who have completed two years of high school Latin more than two years prior to their entrance into the University may be permitted by action of the Department to enroll in Latin 1-2 for credit.

11-12 INTERMEDIATE LATIN.

Three hours. I, II

Extensive review of Latin syntax. Cicero, *In Catilinam* I, II; *Pro Archia*. Vergil, *Aeneid*, Books I and II.

Prerequisite: 1-2, or two years of high-school Latin.

Mr. Kent

21-22 LIVY AND HORACE.

Three hours. I, II

Selected passages from Livy, Books XXI and XXII; lectures on Roman historiography. Selections from Horace's *Odes*, with special attention to metrical problems and to poetic diction.

Prerequisite: 11-12, or four years of high-school Latin.

Mr. Kent

101 ROMAN LETTERS.

Three hours. I

The reading of selected letters of Cicero, Pliny, and Fronto; special attention to their historical contribution to our knowledge of their times.

Prerequisite: 21-22.

Mr. Pooley

102 ROMAN LYRIC POETS.

Three hours. II

Selections from the works of Catullus, Horace, Propertius, Tibullus, and Statius.

Prerequisite: 21-22.

Mr. Pooley

G113 ROMAN EPIC POETS.

Three hours. I

Extensive reading from Vergil's *Eclogues* and *Aeneid* and from Ovid's *Metamorphoses*. Lectures on the historical development of Roman epic forms and Latin hexameter verse. (Offered in alternate years, 1952-53.)

Prerequisite: 101-102.

G114 ROMAN REPUBLICAN PROSE.

Three hours. II

Extensive reading in the works of Caesar and Sallust, and in the speeches of Cicero. (Offered in alternate years, 1952-53.)

Prerequisite: 101-102.

G115 HISTORIANS OF THE EMPIRE.

Three hours. I

Augustus, *Res Gestae*. Tacitus, *Annals*, I-IV. Selections from Suetonius and Ammianus Marcellinus. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102.

Mr. Kent

G116 ROMAN SATIRE.

Three hours. II

Selections from the satires of Horace and Persius. Juvenal, *Satires* I, III, X. Lectures and outside reading on the development of this literary form. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102.

Mr. Kent

G120 LATIN PROSE COMPOSITION.

Three hours. 1

Required of those who wish to be recommended to teach Latin.

Prerequisite: 101-102.

Staff

For LATIN LITERATURE IN TRANSLATION, see General Literature 4.

For THE TEACHING OF LATIN, see Secondary Education 152.

ECONOMICS

For courses in ECONOMICS, see the College of Technology.

EDUCATION

For courses in EDUCATION, see the School of Education and Nursing.

*ENGLISH

Professors Pope† and Lindsay; Associate Professors Hughes and Wainwright; Assistant Professors Aldridge, Bandel, Bogorad, Dean, Marston, Sullivan, and Trevithick; Mr. Akey, Mrs. Gose, Messrs. Hoffman, Hopwood, Long, and McArthur, Mrs. Wilson

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of "English Literature" and six semester courses of advanced grade. The advanced related course may be in language, music, or any course approved by the department. It is expected that an advanced related course will be taken in the senior year.

1-2 ENGLISH COMPOSITION.

Three hours. 1, II

Criticism of the common errors of writing and speech; study of words, sentences, and paragraph construction; theme writing, oral reports, study of selected literature as illustrative of the principles discussed. Required of all freshmen, except those who demonstrate proficiency by a preliminary test.

The Staff

13, 14 PERIODICAL WRITING.

Three hours. 1, II

13 News writing.

14 Short story and other forms of writing.

Prerequisite: 1-2 or exemption therefrom.

Mr. Dean

16 EXPOSITORY WRITING.

Three hours. 1, II

The writing of expository papers and articles. Required of sophomore engineers; open to others only by permission of the department.

Prerequisite: 1-2 or exemption therefrom.

The Staff

* Sophomores and freshmen excused from English Composition must take English Literature, American Literature or World Literature.

† On leave, 1950-51.

18 ADVANCED COMPOSITION.

Three hours. II

Recommended to those who wish to teach English, and to those who wish practice in writing. (Offered in alternate years, 1951-52.)

Prerequisite: sophomore standing.

Mr. Aldridge

21, 22 ENGLISH LITERATURE.

Three hours. I, II

An outline of the history of English literature from its beginning to modern times. Required of students concentrating in English.

Prerequisite: 1-2 or exemption therefrom.

The Staff

23, 24 AMERICAN LITERATURE.

Three hours. I, II

A survey of American literature, exclusive of the drama, from colonial beginnings to the present. Extensive reading, written reports, and class discussions.

23 The 17th to the mid-19th century.

24 The mid-19th century to the present.

Prerequisite: 1-2 or exemption therefrom.

The Staff

25, 26 MASTERPIECES OF WORLD LITERATURE.

Three hours. I, II

A detailed study, in English translation, of ten masterpieces of world literature which have made significant contributions to the development of western culture.

Prerequisite: 1-2 or exemption therefrom.

Miss Bandel

G101 CHAUCER.

Three hours. I

The chief minor poems and some of *The Canterbury Tales*, with emphasis on the reading of Chaucer's work as poetry, his literary scope and qualities, and the picture of his time portrayed in his writing.

Prerequisite: 21, 22; 23, 24; or 25, 26.

Miss Hughes

G107-108 SHAKESPEARE.

Three hours. I, II

Lectures and collateral reading on the Elizabethan drama with literary study and textual interpretation of selected plays of Shakespeare.

Prerequisite: 21, 22; 23, 24; or 25, 26. Mr. Lindsay and Miss Hughes

G111 RENAISSANCE POETRY.

Three hours. I

The major poets of Tudor and Stuart England, from Wyatt and Surrey to Donne and his followers, with special emphasis on Spenser and the development of Elizabethan lyric poetry. (Offered in alternate years, 1951-52.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Bogorad

G112 MILTON.

Three hours. II

The works of John Milton, including *Paradise Lost*, *Paradise Regained*, *Samson Agonistes*, some of the minor poems, and selections from the prose works. Lectures, discussions, and reports. (Offered in alternate years, 1951-52.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Bogorad

G117, 118 RESTORATION AND EIGHTEENTH CENTURY. *Three hours. I, II*

The works, including selected plays and novels, of significant writers from 1660 to 1800, from Dryden to the early romantic poets. Particular emphasis on the rise of the essay, the satires of Pope and Swift, and the works of Dr. Johnson and his circle. (Offered in alternate years, 1952-53.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Bogorad

G121, 122 THE ROMANTIC PERIOD.

Three hours. I, II

Lectures and class discussion, collateral reading, individual study of selected topics and reports in class. (Offered in alternate years, 1951-52.)

121 The development of the Romantic Movement through Wordsworth and Coleridge.

Mr. Lindsay

122 Byron, Shelley, Keats, and other Romantic poets and prosewriters.

Mr. Pope

Prerequisite: 21, 22; 23, 24; or 25, 26.

G127-128 ENGLISH NOVEL.

Three hours. I, II

English fiction from its origins through the nineteenth century. Masterpieces are stressed and read critically. (Offered in alternate years, 1951-52.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Wainwright

G131-132 VICTORIAN LITERATURE. (1832-1900). *Three hours. I, II*

A study of the lives and the works (except the novel) of the significant writers of the era by lectures, discussion, and reports. Outstanding poets and prose writers are studied as spokesmen of their own age and harbingers of the present one. (Offered in alternate years, 1952-53.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Wainwright

G137 MODERN NOVEL.

Three hours. I

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Aldridge

G138 MODERN DRAMA.

Three hours. II

(Offered in alternate years, 1950-51.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. McArthur

G139 MODERN AMERICAN AND BRITISH POETRY.

Three hours. I

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Wainwright

G140 MODERN SHORT STORY.

Three hours. II

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Lindsay

G151, 152 AMERICAN NOVEL.

Three hours. I, II

Masterpieces of nineteenth-century American fiction selected on the basis of literary merit. Lectures, class discussions, oral and written reports. (Offered in alternate years, 1952-53.)

151 Hawthorne, Melville, and others.

152 Mark Twain, Howells, James and others.

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Trevithick

G157, 158 MAJOR AMERICAN AUTHORS.

Three hours. I, II

The writings of some major American authors considered from the viewpoint of literature, their historical importance, and their contributions to the thought of the present. Informal discussion, textual analysis, prepared papers. (Offered in alternate years, 1951-52.)

157 Emerson, Whitman, and Thoreau

Mr. Lindsay

158 Poe, Emily Dickinson, and T. S. Eliot

Mr. Trevithick

Prerequisite: 21, 22; 23, 24; or 25, 26.

G160 MODERN ENGLISH.

Three hours. II

The development of Modern English; Modern English usage, with readings of illustrative selections. (Offered in alternate spring terms, 1952.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Miss Hughes

G162 OLD AND MIDDLE ENGLISH.

Three hours. II

Development of the language through the Old and Middle English periods, with readings of illustrative selections. (Offered in alternate spring terms, 1953.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Miss Hughes

G171, 172 LITERARY THEORY.

Three hours. I, II

The more important critical writings, ancient and modern, considered as contributions to the theory of literature and as aids to interpretation of literary works. (Offered in alternate years, 1952-53.)

171 Bibliography and methods of literary study.

172 History and principles of criticism.

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Lindsay

G174 POETICS.

Three hours. II

An introduction to poetics, with an elementary study of the forms and nature of poetry. (Offered in alternate years, 1951-52.)

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Lindsay

G175-176 CREATIVE CRITICISM.

Three hours. I, II

A seminar devoted to critical analysis of contemporary fiction.

Prerequisite: 21, 22; 23, 24; or 25, 26.

Mr. Aldridge

For BIBLICAL LITERATURE, see Religion 11, 12; for foreign literatures in translation, see General Literature.

GENERAL LITERATURE

1 GREEK LITERATURE IN TRANSLATION.

Three hours. I

Lectures on the development of the various branches of Greek literature and on its chief authors, with special emphasis on Homeric epic and drama. Readings in standard translations from the more important writers. No knowledge of Greek required.

Prerequisite: junior standing.

Mr. Turner

4 LATIN LITERATURE IN TRANSLATION.

Three hours. II

Lectures on the development of Latin literature and on the principal Latin writers, with some emphasis on the historical background and attention to the relation of Latin literature to Greek and English literature. Readings in standard translations from the more important authors. No knowledge of Latin required.

Prerequisite: junior standing.

12 GERMAN LITERATURE IN TRANSLATION.

Three hours. II

Lectures on the development of German literature; reading and discussion of representative works. No knowledge of German required.

Prerequisite: junior standing.

Mr. Carpenter

GEOLOGY

Associate Professor Doll

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of eight semester courses in geology, of which four are of advanced grade, and of one advanced related course (six semester hours or more) in botany, chemistry, physics, or zoology. A course in some other subject may be approved, to meet particular needs.

1-2 INTRODUCTORY GEOLOGY. (3-2)

Four hours. I, II

The composition, structure, and surface forms of the earth, and the agencies active in their production; a general survey of the earth's history as recorded in the rocks. Lectures, laboratory, field trips, and lantern slides.

11 MINERALOGY. (2-2)

Three hours. I

The crystallographic and physical properties of minerals, and their determination by means of the blowpipe. Lectures and laboratory.

Prerequisite: 1-2.

12 ECONOMIC GEOLOGY. (2-2)

Three hours. II

The characteristics, occurrence, distribution, production, and uses of the more important mineral resources. Trips to Vermont localities of economic interest. Lectures and laboratory.

Prerequisite: 11.

21 ENGINEERING GEOLOGY. (2-2)

Three hours. I

The recognition of common minerals and rocks; rock structures and their effects on engineering problems. Lectures and laboratory. *Required of students in Civil Engineering, not open to others.*

111 STRUCTURAL GEOLOGY. (2-2)

Three hours. I

Structural features of the earth's crust produced by earth movements. Emphasis on the mechanics of folding, fracturing, faulting,

and rock flowage, and the relation of such structures to mountain-building. Lectures and laboratory. (Offered in alternate years, 1951-52.)

Prerequisite: 11.

112 FIELD GEOLOGY. (1-6)

Three hours. II

Field methods in the geologic mapping of an assigned area. One conference a week on the problems and progress of the field work; a written report on the area, accompanied by a field map, submitted at the end of the course. (Offered in alternate years, 1951-52.)

Prerequisite: 111.

115-116 PHYSIOGRAPHY. (2-2)

Three hours. I, II

The land forms on the surface of the earth and their origins; external and internal forces modifying the earth. The physiographic provinces of North America are emphasized. Lectures and laboratory. (Offered in alternate years, 1952-53.)

Prerequisite: 1-2.

GERMAN

Professor Carpenter; Assistant Professors Webster and Wurthmann; Mr. Kahn.

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of eight semester courses in German, including at least four of advanced grade, and at least one advanced related year course, normally in a language.

1-2 ELEMENTARY GERMAN.

Three hours. I, II

For students who present less than two years of entrance German. Pronunciation, oral practice, grammar, and easy reading are stressed during the first semester, the reading of simple narrative material during the second. *Credit is allowed only if German 11-12 is also completed.*

11-12 INTERMEDIATE GERMAN.

Three hours. I, II

Intensive and extensive reading of short stories, novels, plays, and some scientific material, with particular emphasis on the acquisition of a basic vocabulary necessary for reading German works in any field. *Prerequisite:* 1-2 or equivalent.

21, 22 COMPOSITION AND CONVERSATION.

Three hours. I, II

Training in writing and speaking German. Translation into German, free composition, and oral reports are required.

Prerequisite: 11-12 and permission of the department. *Mr. Wurthmann*

23-24 SCIENTIFIC GERMAN.

Three hours. I, II

A course in the reading of scientific prose which aims not only to

build up reading ability in that branch of science in which the student is specializing, but also to acquaint him with the general development of thought and method in his field. After the first four weeks, individual assignments are made along the line of each student's main interest.

Prerequisite: 1-12 and permission of the department. *Mr. Kahn*

G101-102 INTRODUCTION TO GERMAN LITERATURE. *Three hours. I, II*

Selected works of Goethe, Schiller, and Lessing, and a survey of the development of German literature from the beginnings through the classical period, with practice in hearing, writing, and speaking German.

Prerequisite: 11-12. *Mr. Webster*

G105 GOETHE'S FAUST. *Three hours. I*

Reading in class of Part I and most of Part II; study of sources of the poem and its influence, particularly on English literature; outside reading of several plays from other literatures, which deal with a similar theme. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102. *Mr. Carpenter*

G106 GERMAN LITERATURE: 1800-1850. *Three hours. II*

The Romantic movement and Young Germany. Reading of selected works, chiefly by Kleist, Grillparzer, and Heine. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102. *Mr. Carpenter*

G107 GERMAN LITERATURE: 1850-1900. *Three hours. I*

Reading in class of plays, beginning with dramas of Hebbel, illustrating the development of the realistic trend which burst forth in Naturalism; study of Impressionism and Neo-romanticism; outside reading of typical short stories and novels. (Offered in alternate years, 1952-53.)

Prerequisite: 101-102. *Mr. Carpenter*

G108 GERMAN LITERATURE: THE 20TH CENTURY. *Three hours. II*

Reading in class of selected works, mainly dramas, exemplifying Expressionism and New Reality; collateral reading of typical short stories and novels. (Offered in alternate years, 1952-53.)

Prerequisite: 101-102. *Mr. Carpenter*

G121, 122 ADVANCED COMPOSITION AND CONVERSATION. *Three hours. I, II*

Training in the written and oral use of German, with special attention to the acquisition of a correct pronunciation, based on the study of phonetics. Recommended to those preparing to teach German.

Prerequisite: 21, 22 or 101-102, and permission of the department. *Mr. Kahn*

HEBREW

1-2 ELEMENTARY HEBREW.

Three hours. I, II

Reading, pronunciation, elements of grammar and conversation; exercises in composition and translation, designed to prepare the student to understand the Hebrew Scriptures and modern Hebrew literature.

Mr. Kahn

HISTORY

*Professor Evans; Associate Professors Pooley, Putnam and Schultz;
Assistant Professor Turner; Mr. Cooley*

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of four year courses (twenty-four semester hours) in history, including two of advanced grade, and at least one advanced related course, ordinarily in one of the other social sciences.

1-2 ANCIENT HISTORY.

Three hours. I, II

A survey of the ancient Greek and Roman worlds. *Mr. Turner*

5-6 MEDIAEVAL EUROPE.

Three hours. I, II

The history of Europe from the late Roman Empire to the Renaissance, with particular emphasis on political and cultural developments.

Mr. Pooley

11-12 SURVEY OF EUROPEAN HISTORY.

Three hours. I, II

An introduction to European history, commencing with the rise of the national state and the beginnings of modern economic life.

Messrs. Evans and Cooley

21, 22 SURVEY OF AMERICAN HISTORY.

Three hours. I, II

A general survey of American history from the early national period to the present, for students who intend to take only one course in the subject.

Mr. Schultz

Prerequisite: sophomore standing; 21 for 22.

111-112 EARLY MODERN HISTORY.

Three hours. I, II

The Renaissance, the Reformation, and sixteenth century Europe, with special attention to the economic and social history of the period.

Prerequisite: one course.

Mr. Evans

113, 114 EUROPE IN THE MODERN AGE.

Three hours. I, II

History of Europe from the seventeenth century to the present.

Prerequisite: one course; 113 for 114.

Mr. Cooley

121-122 EARLY AMERICAN HISTORY.

Three hours. I, II

American history from the discovery through the American Revolution. (Offered in alternate years, 1952-53.)

Prerequisite: one course.

Mr. Putnam

123-124 LATER AMERICAN HISTORY.

Three hours. I, II

History of the United States in the Twentieth Century. (Offered in alternate years, 1951-52.)

Prerequisite: one course.

Mr. Putnam

G127-128 AMERICAN FRONTIERS.

Three hours. I, II

The westward movement to the end of the nineteenth century and its influence in shaping American ideals and institutions. (Offered in alternate years, 1952-53.)

Prerequisite: 121-122, or 123-124.

Mr. Putnam

G141-142 FRENCH REVOLUTION AND NAPOLEON.

Three hours. I, II

French history from 1789 to 1815, with special attention to the impact of French ideas and power upon Europe.

Prerequisite: 113, 114 and one other course.

Mr. Evans

G151-152 CONTEMPORARY HISTORY.

Three hours. I, II

The world since 1918, stressing the background of current events.

Prerequisite: two courses, preferably 113, 114 and 123-124.

Mr. Evans

G155-156 ENGLISH HISTORY.

Three hours. I, II

The British role in history since Roman days.

Prerequisite: 11-12; English 21-22 or equivalent; junior standing.

Mr. Schultz

G157, 158 AMERICAN STATESMEN.

Three hours. I, II

The thought and practices of leading American politicians. (Offered in alternate years, 1951-52.)

Prerequisite: junior standing; for 157, courses in the history of Europe and the United States since 1783; 157 for 158.

Mr. Schultz

G161-162 LATIN AMERICAN HISTORY.

Three hours. I, II

The political, social, and economic development since the Spanish Conquest. (Offered in alternate years, 1952-53.)

Prerequisite: two courses.

Mr. Putnam

G165-166 CANADIAN HISTORY.

Three hours. I, II

Canadian development from the French exploration and settlement to the present with emphasis on the evolution of self-government and relations with the United States. (Offered in alternate years, 1951-52.)

Prerequisite: two courses.

Mr. Putnam

G191-192 SEMINAR.

Two hours. I, II

Advanced study in a selected field. Open to graduate students and to seniors by permission. (Offered in alternate years, 1951-52.)

Mr. Putnam

HOME ECONOMICS

Credit for courses listed below is accepted for degrees conferred by this college:

FAMILY LIVING

152 FAMILY LIVING.

153 CHILD CARE AND DEVELOPMENT.

HOME MANAGEMENT

102 HOME MANAGEMENT.

Other courses may be taken by students without credit toward degrees conferred by this college. For descriptions, refer to HOME ECONOMICS in the section listing courses offered by the College of Agriculture.

MATHEMATICS

For courses in MATHEMATICS, see the College of Technology.

*MUSIC

Professor Bennett; Associate Professor Pappoutsakis; Assistant Professors Kinsey and Marston; Mr. Weinrich and Mrs. Start

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of 1, 2, 7-8, and two of the following: 101-102, 105-106, 107-108, and 121, 122. It is recommended that the related course be Aesthetics (Psychology 113-114) or an advanced course in French or German.

HISTORY AND THEORY OF MUSIC

1, 2 SURVEY OF MUSICAL LITERATURE.

Three hours. I, II

Orchestral, chamber, choral, and operatic music for concert and radio listeners. No previous technical knowledge is required.

1 From Palestrina to Beethoven.

2 From Schubert to Stravinsky.

Mr. Bennett

5-6 ELEMENTARY SIGHT-SINGING, EAR-TRAINING, AND THEORY.

Three hours. I, II

Recommended to precede or accompany 7-8, but may be taken separately.

Mr. Pappoutsakis

7-8 ELEMENTARY HARMONY.

Three hours. I, II

Structure and use of chords; harmonization of melodies in various styles; simple original composition.

Prerequisite: familiarity with scales and keys, and ability to read simple music at the piano.

Mr. Kinsey

* For the curriculum in Music Education, see the index.

11-12 ADVANCED SIGHT-SINGING, EAR-TRAINING, AND THEORY.

Three hours. I, II

Recommended to precede or accompany 101-102 or 105-106, but may be taken separately.

Prerequisite: 5-6.

Mr. Pappoutsakis

G101-102 ADVANCED HARMONY AND HARMONIC ANALYSIS.

Prerequisite: 7-8.

Three hours. I, II

Mr. Kinsey

G105-106 COUNTERPOINT.

Prerequisite: 7-8.

Three hours. I, II

Mr. Bennett

G107-108 ORCHESTRATION AND CONDUCTING.

Three hours. I, II

The characteristics of instruments; arranging for orchestra; technique of the baton; elementary instrumental technique. (Offered in alternate years, 1952-53.)

Prerequisite: 7-8; 101-102 is also desirable.

Mr. Pappoutsakis

G109-110 ADVANCED ORCHESTRATION.

Three hours. I, II

Arranging for full orchestra, including a study of the less frequently used instruments. This course presupposes a knowledge of the range, transposition, and characteristics of the usual orchestral instruments, and the ability to arrange music of moderate difficulty for strings, woodwind, and brass.

Prerequisite: 107-108.

Mr. Pappoutsakis

121, 122 HISTORY OF MUSIC.

Three hours. I, II

Changes in musical structure and style, and their relation to contemporary artistic, literary, religious, and social movements.

121 The Renaissance, Bach, Mozart.

122 Beethoven, romanticism, Brahms, the twentieth century.

Prerequisite: 1, 2; junior standing.

Mr. Bennett

MUSIC EDUCATION

31, 32 ELEMENTARY SCHOOL METHODS AND PRACTICE TEACHING.

Three hours. I, II

The teaching of music in the primary and grammar grades. Observation and practice teaching in the schools of Burlington and vicinity. (Offered in alternate years, 1951-52.)

31 Grades 1 to 3.

32 Grades 4 to 6.

Prerequisite: 1, 2; credit or enrollment in 5-6.

G151, 152 SECONDARY SCHOOL METHODS AND PRACTICE TEACHING.

Three hours. I, II

The administration and content of required and elective high school

music courses. Observation and practice teaching in the schools of Burlington and vicinity. (Offered in alternate years, 1952-53.)

151 Junior high school music.

152 Senior high school music.

Prerequisite: credit or enrollment in 1, 2 and 5-6.

Miss Marston

G155-156 APPLIED MUSIC METHODS.

One hour. I, II

Methods of teaching piano, organ, voice, or violin.

Prerequisite: three years' instruction in chosen instrument at the University, or equivalent.

Miss Marston, Mr. Weinrich and Mrs. Start

For SCHOOL MUSIC, see Elementary Education 11-12 and 13-14.

APPLIED MUSIC

41, 42 CHOIR.

**One hour. I, II*

Study of works by Bach, Handel, Palestrina, modern Russian composers and others. Weekly services; monthly vespers; Christmas, Lenten-Easter, and other concerts; annual opera; Baccalaureate service. Three hours of rehearsal weekly, if taken for credit.

Mr. Bennett, director; Miss Marston, organist

43, 44 ORCHESTRA.

**One hour. I, II*

Study of symphonic and other instrumental literature. The orchestra plays at concerts and the opera, alone and with the choir, and at Commencement. Three hours of rehearsals weekly.

Mr. Pappoutsakis, conductor

47, 48 PIANO.

**One or two hours. I, II*

Adapted to the student's purposes and needs; may include repertoire, technic, improvising accompaniments to melodies, and sight-reading.

Miss Marston and Mr. Kinsey

49, 50 ORGAN.

**One or two hours. I, II*

Preparation for recital and church service playing, including hymns and accompaniments.

Miss Marston

53, 54 VOICE.

**One or two hours. I, II*

Instruction in accepted natural vocal production; repertoire (in the course of four years) of old Italian songs, German lieder, modern French songs, oratorio and operatic arias.

Mr. Weinrich

* All courses in applied music may be taken for several years, but no student may receive credit toward graduation totalling more than six semester hours in choir or orchestra or both together. One hour of credit per semester will be given for one private lesson in piano, organ, voice, or violin under a member of the department, and five hours practice per week, on condition that the instruction be accompanied or preceded by either Music 1, 2 or 7-8; two hours credit will be given for two private lessons and ten hours practice per week, on the same condition.

For the fees for instruction and use of organ, see the Index under "Fees."

55, 56 VIOLIN.

*One or two hours. I, II

Study of fundamental technic and tone production, preparing for orchestral, chamber music and solo performance. For those qualified, advanced study of artist repertoire. Mrs. Start

PHILOSOPHY AND RELIGION

Professor Dykhuizen; Assistant Professors Hall and Levitsky

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of Philosophy 1, 2, 4, 107, 108, 114, and either 103 or 105, and an advanced related course or courses, chosen in consultation with the departmental advisor to fit the needs of the individual student.

PHILOSOPHY

1 INTRODUCTION TO PHILOSOPHY.

Three hours. I

A presentation of the chief problems of philosophy.

Prerequisite: sophomore standing. *Messrs. Dykhuizen and Levitsky*

2 LOGIC.

Three hours. II

The principles and conditions of correct thinking with emphasis on the detection of fallacies of thought.

Prerequisite: sophomore standing. *Messrs. Dykhuizen and Levitsky*

4 ETHICS.

Three hours. II

An examination of the ideas underlying man's moral behavior. The aim is to develop an acceptable and coherent theory of conduct.

Prerequisite: sophomore standing. *Messrs. Dykhuizen and Levitsky*

20 SOCIAL PHILOSOPHY OF AMERICAN AGRICULTURE.

Three hours. I

European backgrounds; the history of American thought regarding agriculture in this country; the more important agricultural problems of today in the light of American democratic thought. Normally open for credit only to students in Agriculture.

Prerequisite: senior standing. *Mr. Dykhuizen*

G103 METAPHYSICS.

Three hours. I

Basic philosophical problems concerning knowledge, value, and reality.

Prerequisite: 1; junior standing. *Mr. Levitsky*

G105 SOCIAL PHILOSOPHY.

Three hours. I

The meanings and values inherent in social life.* (Offered in alternate years, 1952-53.)

Prerequisite: 1 or 4; junior standing. *Mr. Levitsky*

* See footnote on page 56.

G107, 108 HISTORY OF PHILOSOPHY.

Three hours. I, II

107 Ancient and Medieval philosophy.

108 Modern philosophy.

Prerequisite: 1; junior standing.*Mr. Dykhuizen*

G109 HISTORY OF AMERICAN PHILOSOPHY.

Three hours. I

The thought of leading American philosophers from colonial times to the present. (Offered in alternate years, 1951-52.)

Prerequisite: 1; junior standing.*Mr. Levitsky*

G114 INTELLECTUAL BACKGROUND OF MODERN LIFE.

Three hours. II

Intellectual movements which have influenced the thought and life of today.

Prerequisite: senior standing or consent of the instructor.*Mr. Dykhuizen*

For AESTHETICS, see Psychology 113-114.

For ECONOMIC PHILOSOPHY, see Economics 195 and 196.

For POLITICAL PHILOSOPHY, see Political Science 193, 194.

RELIGION

1-2 HISTORY OF RELIGION.

Three hours. I, II

Religion from early primitive forms to the great world religions of the present. Study of the living religions of today with most emphasis given to Hinduism, Buddhism, Confucianism, Shinto, Judaism, Islam, and Christianity.

Prerequisite: sophomore standing.*Mr. Hall*

11-12 OLD AND NEW TESTAMENT.

Three hours. I, II

A critical study of the Jewish-Christian tradition. It includes much reading in the scripture as well as in background material.

Prerequisite: sophomore standing.*Mr. Hall*

SOCIOLOGY

1-2 INTRODUCTORY SOCIOLOGY.

Three hours. I, II

The basic features of group behavior; sociological concepts, social organization, and social interaction.

Prerequisite: sophomore standing.*Mr. Levitsky*

G102 SOCIAL PROBLEMS.

Three hours. II

A descriptive analysis of particular social problems.

Prerequisite: Philosophy 4 or Psychology 1-2 or Sociology 1-2; junior standing.

Mr. Levitsky

PHYSICS

Professors Holmes and Walbridge; Assistant Professors Rooney and Woodward; Messrs. Burgess and Shields

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of three advanced courses in physics and Mathematics 111, 112. Additional advanced courses in physics, mathematics, and chemistry are recommended.

1-2 INTRODUCTORY PHYSICS. (2-2) *Three hours. I, II*

An introductory course for students not concentrating in a science. Subjects included are mechanics, heat, sound, light, electricity, and magnetism. Demonstration lectures, presenting experimental facts and theoretical conclusions, are closely coordinated with laboratory work. *Prerequisite:* one year each of secondary school algebra and geometry.

The Staff

11-12 GENERAL PHYSICS. (3-4) *Five hours. I, II*

For students concentrating in a science. The first semester deals with mechanics and heat, the second with sound, light, electricity and magnetism, and atomic physics. Experimental facts and theoretical principles are presented, with special attention to the scientific method employed and emphasis on training in simple reasoning. Laboratory and class work are closely coordinated.

Prerequisite: Mathematics 1, 2 or 11.

The Staff

G111, 112 MECHANICS AND WAVE MOTION. (3-0) *Three hours. I, II*

Continuation and developments of the principles and methods of mechanics with emphasis on the integration of fundamental physical principles with mathematics and with the extension of these principles to wave motions. (Offered in alternate years, 1952-53.)

111 Forces and other vector quantities. Work and energy.

112 The dynamics of rigid bodies, wave motion and introduction to wave mechanics.

Prerequisite: 11; Mathematics 111, taken concurrently. *Mr. Walbridge*

G121, 122 HEAT AND THERMODYNAMICS. *Three hours. I, II*

Experimental facts and theoretical principles of heat. (Offered in alternate years, 1952-53.)

121 Thermometry, expansion, specific heat and gas laws. (2-2)

122 Thermal conduction and thermodynamics (3-0). The basic theory of the conduction of heat and the relation between work and heat; various thermodynamical cycles and the thermodynamics of radiation.

Prerequisite: 11 and Calculus for 121; 121 and Mathematics 111 for 122.

Mr. Woodward

G141, 142 ELECTRICITY AND MAGNETISM. (2-2) *Three hours. I, II*

The fundamental principles; magnetic and electric field strengths and potentials. Resistance and energy relations in direct current cir-

cuits; capacitance and inductance; applications to transient phenomena; alternating currents.

141 Basic principles of magnetism and electrostatics, resistance and energy relations.

142 Capacitance; inductance and alternating currents.

Prerequisites: 12 and Calculus for 141; 141 for 142. *Mr. Holmes*

G161, 162 OPTICS AND SPECTROSCOPY. (2-2) *Three hours. I, II*

A geometrical theory of reflection and refraction, mirrors and lenses; the wave properties of light, interference and diffraction, polarized light; the spectra of various elements and their part in the development of theories of atomic structure. (Offered in alternate years, 1951-52.)

161 The centered optical system.

162 Physical optics and spectroscopy.

Prerequisite: 12 for 161; 161 and Calculus for 162. *Mr. Woodward*

G171, 172 ELECTRON AND ATOMIC PHYSICS. (2-2) *Three hours. I, II*

The behavior of individual electrons and of aggregates of electrons; phenomena associated with motions of electrons in magnetic fields; photoelectric effect and thermionic emission; vacuum tube characteristics and applications; radioactivity and nuclear physics.

171 Fundamental electronics and thermionic emission.

172 Vacuum tube circuits: ionization; radioactivity and cosmic rays.

Prerequisite: 12 and Calculus for 171; 171 for 172.

Messrs. Holmes and Rooney

G173, 174 ADVANCED ELECTRON AND ATOMIC PHYSICS. (3-0)

Three hours. I, II

Further consideration of some of the subject matter of G171, 172 with special attention to more advanced mathematical theory.

173 Free electrons and electromagnetic radiations

174 Special relativity; quantum theory; nuclear physics.

Prerequisites: 172 and Mathematics 111.

Mr. Walbridge

181-182 EXPERIMENTAL PHYSICS. (0-6) *Three hours. I, II*

Students concentrating in Physics may, with the approval of a member of the staff, select a subject and work without the detailed guidance necessary in the usual type of laboratory work. The course is a step between ordinary undergraduate laboratory work and elementary research. It will involve both theoretical and experimental work. The student will do independent study with frequent consultations with the instructor. (Not offered 1951-52.)

Prerequisite: two advanced year courses.

The Staff

G201-202 SEMINAR.

One hour. I, II

Members of the staff and graduate students meet once a week to

study contemporary advances in Physics and for reports on research being done in the department.
The Staff

G211-212 RESEARCH.

Nine to twelve hours. I, II

For students seeking a Master of Science degree in Physics. A problem is selected in consultation with a member of the staff.

Prerequisite: nine semester courses in the 100 group and either advanced calculus or differential equations.
The Staff

POLITICAL SCIENCE

Professor Carroll; Associate Professor Nuquist; Assistant Professors Babcock, Haugen and Little; Mr. Robinson

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of four semesters of advanced courses in political science and an advanced course (six or more semester hours) ordinarily in one of the other social sciences.

1, 2 AMERICAN GOVERNMENT.

Three hours. I, II

1 The federal government.

2 State governments.

The Staff

51, 52 INTERNATIONAL RELATIONS.

Three hours. I, II

51 Development and principles of international politics.

52 International organization.

Prerequisite: sophomore standing; 51 for 52.

Messrs. Babcock and Little

61, 62 LOCAL GOVERNMENT.

Three hours. I, II

61 Rural government.

62 Municipal government.

Prerequisite: sophomore standing.

Mr. Nuquist

71, 72 COMPARATIVE GOVERNMENT.

Three hours. I, II

71 Governments of the British Commonwealth of Nations.

72 Governments of Continental Europe.

Prerequisite: sophomore standing.

Mr. Robinson

76 GOVERNMENTS OF THE FAR EAST.

Three hours.

(Not offered 1951-52.)

77 GOVERNMENTS OF LATIN AMERICA.

Three hours.

(Not offered 1951-52.)

G151 FOREIGN POLICY OF THE UNITED STATES.

Three hours. I

Nature and conduct of American foreign policy.

Prerequisite: any course except 1, 2.

Mr. Little

G153-154 WORLD POLITICS.*Three hours. I, II*

An analysis of the foreign policies of countries other than the United States, with emphasis on selected problems in Europe, Latin America, and the Pacific Area.

Prerequisite: 51, 52.

Mr. Little

G156 INTERNATIONAL LAW.*Three hours. II*

Principles and applications of public international law.

Prerequisite: 51, 52.

Mr. Little

G163 STATE GOVERNMENT.*Three hours. I*

Organization and administration of state government.

Prerequisite: 1, 2, and one other course.

Mr. Haugen

G173, 174 CONSTITUTIONAL LAW.*Three hours. I, II*

173 Nature of the American constitutional system.

174 Organization and power of Congress.

Prerequisite: 1, 2, and either one other course or Economics 11, 12; junior standing.

Mr. Carroll

G177, 178 INTERGOVERNMENTAL RELATIONS.*Three hours. I, II*

The interrelations of national, state, and local governments in the United States, including a study of special districts, interstate cooperation, and administrative controls accompanying grants-in-aid.

177 Modern problems of the federal system.

178 Joint administration of public functions.

Prerequisite: 1, 2 and either one other course or Economics 103-104; 177 or 183 for 178.

Mr. Haugen

G183-184 PUBLIC ADMINISTRATION.*Three hours. I, II*

183 Organization and function of public administration.

184 Procedure of administrative agencies.

Prerequisite: 1, 2 and one other course.

Mr. Nuquist

G186 ADMINISTRATIVE LAW.*Three hours. II*

(Not offered 1951-52.)

Prerequisite: 1, 2, and one other course.

Mr. Nuquist

G193, 194 POLITICAL THEORY.*Three hours. I, II*

193 Development of political theory.

194 Recent political theory.

Prerequisite: two courses.

Messrs. Babcock and Robinson

G196 POPULAR GOVERNMENT.*Three hours. II*

Problems of popular government, both national and international, throughout the world, including electoral procedures, non-voting, types of government, legislative organization, relation between branches of government, and trend toward centralization.

Prerequisite: two semesters of advanced work in political science.

Mr. Carroll

PSYCHOLOGY

*Professor Metcalf; Associate Professors Ansbacher and Chaplin;
Assistant Professor Roby; Misses Pizinger and Flurry*

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of at least twelve semester courses, eight in psychology, including 1-2, 104, and 107, and the other four either in zoology or in philosophy. Zoology 1 and 4, in the freshman year if possible, are strongly recommended.

1-2 GENERAL PSYCHOLOGY.*Three hours. 1, II*

An introduction to the entire field, emphasizing the normal adult human being.

Prerequisite: sophomore standing.

*The Staff***G101 SOCIAL PSYCHOLOGY.***Three hours. 1*

The social factors in personality and the psychological aspects of social relations, groups, institutions, and culture.

Prerequisite: 1-2.

*Mr. Ansbacher***G102 PHYSIOLOGICAL PSYCHOLOGY. (2-2)***Three hours. II*

Relationships between the psychological processes and the functions of the nervous system and endocrine glands.

Prerequisite: 1-2.

*Mr. Chaplin***G103 APPLIED PSYCHOLOGY.***Three hours. 1*

Applications of psychological methods to problems of personnel selection, vocational guidance, efficiency of work, influencing others, crime and delinquency, accidents. Training in opinion surveys.

Prerequisite: 1-2.

*Mr. Roby***G104 STATISTICAL METHODS IN PSYCHOLOGY.***Three hours. II*

Tabular and graphic representation of psychological data; measures of central tendency and variability; functions and applications of the normal probability curve; sampling and reliability; testing of experimental hypotheses; and correlation techniques.

Prerequisite: 1-2; Math. 1 or the equivalent.

*Mr. Ansbacher***G105 CHILD PSYCHOLOGY.***Three hours. 1*

The development of the human mind from birth to maturity.

Prerequisite: 1-2.

*Mr. Chaplin***G106 CHARACTER AND PERSONALITY.***Three hours. II*

A survey of methods used and results obtained in the analytical study of the nature and development of the mature individual.

Prerequisite: 1-2.

Mr. Roby

G107 SYSTEMATIC PSYCHOLOGY.*Three hours. I*

A comparative study of the leading contemporary schools of psychological thought.

Prerequisite: 1-2.

Mr. Metcalf

G108 ABNORMAL PSYCHOLOGY.*Three hours. II*

The more unusual mental processes, the methods of observing and interpreting them, and their bearing on our understanding of the normal mind.

Prerequisite: 1-2.

Mr. Metcalf

G109-110 TESTS AND MEASUREMENTS.*Three hours. I, II*

Individual training in the fundamental concepts of psychological measurement, the administration of tests, and the interpretation of results.

Prerequisite: 104.

Mr. Ansbacher

G111-112 EXPERIMENTAL PSYCHOLOGY. (1-4)*Three hours. I, II*

The student performs experiments designed to develop skill in psychological methods of procedure and thought.

Prerequisite: 104.

Mr. Chaplin

G113-114 AESTHETICS.*Three hours. I, II*

The mental processes involved in the response to the beautiful in art and nature.

Prerequisite: 1-2.

Mr. Metcalf

ROMANCE LANGUAGES

Professors Daggett and DeForest; Associate Professors Doane and Johnston; Assistant Professors Towne, Willard, and Roberts; Messrs. Grow and Saindon, Miss DiRubbo

SPECIAL REQUIREMENTS FOR CONCENTRATION IN FRENCH OR SPANISH: Satisfactory completion of six semester courses of advanced grade, and at least one advanced course (six semester hours or more), ordinarily in another foreign language or English.

FRENCH**1-2 ELEMENTARY FRENCH.***Three hours. I, II*

Grammar, pronunciation, composition, translation, dictations, and use of the spoken language, for beginners and those who present less than two years of preparatory French. *Credit is given only if Intermediate French is also completed.*

Mr. Roberts and others

11-12 INTERMEDIATE FRENCH.

Three hours. I, II

Grammar, composition, translation, and conversation. The class work is conducted, as much as possible, in French.

Prerequisite: 1-2 or two years of preparatory French.

Mr. Willard and others

G101-102 INTRODUCTION TO FRENCH LITERATURE.

Three hours. I, II

Recitations, lectures, outside reading and reports. Selected texts from the 17th, 18th, and 19th centuries are the basis of study.

Prerequisite: 11-12.

Messrs. DeForest and Roberts

G107-108 FRENCH LITERATURE: 19TH CENTURY.

Three hours. I, II

Recitations, lectures, outside reading, and reports. A careful study of the outstanding authors of the romantic, realistic, and naturalistic schools.

Prerequisite: 101-102.

Mr. Doane

G111 FRENCH LITERATURE: 18TH CENTURY.

Three hours. I

Selected readings, lectures on the main currents of the literature of the century with emphasis on Montesquieu, Diderot, Voltaire, and Rousseau. Lesage, Marivaux, and Beaumarchais will be studied in the drama. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102.

Mr. Johnston

G112 FRENCH LITERATURE: 20TH CENTURY.

Three hours. II

Lectures on the development of the novel and the drama in the period from 1900 to the present. Selected readings from Proust, Roland Claudel, Gide, Giraudoux, Duhamel, Romain, Malraux, Camus, and Sartre. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102.

Mr. Johnston

G113-114 FRENCH LITERATURE: 17TH CENTURY.

Three hours. I, II

Lectures, recitations, outside reading, and reports. The influence of society, the Academy, and the Church on the literature of the period is emphasized. (Offered in alternate years, 1952-53.)

Prerequisite: 101-102.

Mr. Daggett

G121-122 CONVERSATION AND COMPOSITION.

Three hours. I, II

Composition, conversation, and phonetics. Required of those who wish to be recommended to teach French.

Prerequisite: good standing in 11-12.

Messrs. Doane and Johnston

G201-202 GRADUATE COURSES.

Three hours. I, II

Courses are offered for resident candidates for the Master of Arts degree, and further opportunities for independent work are provided.

ITALIAN

1-2 ELEMENTARY ITALIAN.

Three hours. I, II

Grammar, composition, translation, and practice in the spoken language for beginners.

Prerequisite: permission of the department.

Mr. Johnston

11-12 INTERMEDIATE ITALIAN.

Three hours. I, II

Grammar, composition, translation, and conversation.

Prerequisite: Italian 1-2 or its equivalent.

Mr. Johnston

SPANISH

1-2 ELEMENTARY SPANISH.

Three hours. I, II

Grammar, composition, and translation for beginners, with frequent practice in pronunciation and use of the spoken language. *Credit is given only if Intermediate Spanish is also completed.*

Mr. Doane and others

11-12 INTERMEDIATE SPANISH.

Three hours. I, II

Readings from selected authors. Composition, grammar, and practice in conversation. Spoken Spanish is used to a considerable extent in class.

Prerequisite: 1-2 or two years of preparatory Spanish.

*Mr. Towne and others*G101-102 INTRODUCTION TO SPANISH LITERATURE. *Three hours. I, II*

Selected texts from the 17th century to modern times; recitations, collateral reading, and reports.

Prerequisite: 11-12.

Mr. DeForest

G105-106 SPANISH-AMERICAN LITERATURE.

Three hours. I, II

The evolution of Latin-American thought as reflected in the literatures of the various Spanish-speaking countries from the 15th century to the present. (Not offered 1951-52.)

Prerequisite: permission of the department.

Mr. Willard

G107 SPANISH LITERATURE: 19TH CENTURY.

Three hours. I

The principal literary currents of the 19th century, from Romanticism up to the generation of 1898. Representative readings from the poetry, drama, and novel of the period. (Offered in alternate years, 1951-52.)

Prerequisite: 101-102.

Mr. Willard

G108 SPANISH LITERATURE: 20TH CENTURY.

Three hours. II

The origins and main aspects of the intellectual conflicts in modern Spain, as reflected in the literary works from the generation of 1898 to the present. (Offered in alternate years, 1951-52.)

Prerequisite: 107.

Mr. Willard

- G113-114 **SPANISH LITERATURE: GOLDEN AGE.** *Three hours. I, II*
 Selected readings from the novel, poetry, drama of the 16th and 17th centuries with special attention to Cervantes and the dramatists. (Offered in alternate years, 1952-53.)
Prerequisite: 101-102. *Mr. Willard*
- G121-122 **CONVERSATION AND COMPOSITION.** *Three hours. I, II*
 Composition, conversation, and phonetics. Required of those who wish to be recommended to teach Spanish.
Prerequisite: good standing in 11-12. *Miss DiRubbo*
- G201-202 **GRADUATE COURSES.** *Three hours. I, II*
 Courses are offered for resident candidates for the Master of Arts degree and further opportunities for independent work are provided.

RUSSIAN

- 1-2 **ELEMENTARY RUSSIAN.** *Three hours. I, II*
 Grammar, translation, extensive practice in the spoken and written language for beginners.
Prerequisite: sophomore standing. *Mr. Willard*
- 11-12 **INTERMEDIATE RUSSIAN.** *Three hours. I, II*
 Systematic grammar review, composition, extensive oral practice. Readings from Pushkin, Lermontov, Gogol, Tolstoy, and others.
Prerequisite: 1-2, or its equivalent. *Mr. Willard*

SOCIOLOGY

For courses in SOCIOLOGY, see the Department of Philosophy and Religion.

SPEECH

Professor Huber; Associate Professor Luse; Messrs. Hayes†, Humphrey and Roloff, Miss Frank

- 1 **BASIC SPEECH.** *Three hours. I, II*
 The elements of speech and their practical application to the individual speaking voice. Exercises for developing better communication through vocal and bodily control. *The Staff*
- 3 **PARLIAMENTARY PROCEDURE.** *One hour. I*
 Study and practice in the fundamentals of conducting a meeting. The class meets twice a week with one hour of outside preparation.
Prerequisite: sophomore standing. *Mr. Huber*

† Resigned January 1, 1951.

11 PUBLIC SPEAKING.

Three hours. I, II

Preliminary analysis, gathering material, organization and delivery of public speeches with special attention on the use of visual aids and the speech to inform. Two-thirds of the time is devoted to student performance.

Mr. Roloff and Staff

12 ARGUMENTATION.

Three hours. I, II

Inductive, deductive, and causal reasoning as applied to the speaking situation; designed to develop through performance skill in logical expression of thought.

Prerequisite: 11; sophomore standing.

Mr. Huber

14 GROUP DISCUSSION.

Three hours. II

The basic methods of procedure in committees, round table discussions, lecture forums, symposiums, panels, and other types of discussion; designed to develop through performance skill in the thought processes involved in discussion leadership. (Offered in alternate years, 1951-52.)

Prerequisite: 11; sophomore standing.

Mr. Huber

31 ORAL INTERPRETATION OF LITERATURE.

Three hours. I, II

Study and oral interpretation of prose and poetry; techniques of analysis and presentation. At least two-thirds of the time is devoted to student presentation.

Prerequisite: 1.

Mr. Humphrey

71 VOICE SCIENCE.

Three hours. I

The physical, anatomical, physiological, and phonetic factors of speech. (Offered in alternate years, 1952-53.)

Prerequisite: 1; sophomore standing.

Miss Luse

74 INTRODUCTION TO SPEECH CORRECTION.

Three hours. II

A basic course in the causes, symptoms, and treatment of speech disorders.

Prerequisite: 1; sophomore standing.

Miss Luse

111 PERSUASION.

Three hours. I

Human motivation, attitudes and how to change them, emotion, stereotypes, attention, and audience psychology; training in their use through student performance. (Offered in alternate years, 1952-53.)

Prerequisite: six hours, including 11.

Mr. Huber

116 SPEECH COMPOSITION.

Three hours. II

A study of speech style by analysis of great speeches and by writing longer speeches, intended primarily for those who expect to use public speaking as a basic tool in their careers. (Offered in alternate years, 1952-53.)

Prerequisite: six hours, including 11.

Mr. Huber

133 ACTING AND DIRECTING.

Three hours. I

Introduction to techniques of directing and acting; problems in play analysis, character analysis, and presentation; participation in improvisations and one-act plays as actor and director. Emphasis on group analysis and presentation. (Offered in alternate years, 1951-52.)

Prerequisite: 31.

Mr. Humphrey

140 PLAY PRODUCTION.

Three hours. II

Sources of materials, play selection, casting and rehearsing, production organization. For prospective directors of plays, operettas, and festivals in schools, colleges, and community groups. (Offered in alternate years, 1951-52.)

Prerequisite: 133.

Mr. Humphrey

161 ELEMENTS OF RADIO BROADCASTING.

Three hours. I

An analysis of radio as a medium of mass communication; its history, structure, programs, and personnel; its psychological, sociological, and educational impact upon contemporary life. (Offered in alternate years, 1952-53.)

Prerequisite: six hours of Speech.

Miss Frank

162 WRITING FOR RADIO.

Three hours. II

Analysis of the special problems of writing for the medium of radio; the writing of news, general continuity, dramatic scripts, and television programs. (Offered in alternate years, 1952-53.)

Prerequisite: 161.

Miss Frank

171, 172 SPEECH CORRECTION.

Three hours. I, II

The etiology, symptoms, and treatment of voice and articulatory disorders; the problems of stuttering and organic disorders of speech. (Offered in alternate years, 1951-52.)

Prerequisite: 71 and 74; 171 for 172.

Miss Luse

ZOOLOGY

Professor Moody; Associate Professors Lochhead and Rowell; Assistant Professors Bond and Werner; Misses Nagler and Watson

SPECIAL REQUIREMENTS FOR CONCENTRATION: Satisfactory completion of at least one semester of elementary botany, and in zoology at least eight semester courses, which must include Zoology 1 and 4, three courses (twelve semester hours or more) of advanced grade including Zoology 110 and the senior seminar. The advanced related course (six semester hours or more) may be in botany, chemistry, geology, physics, or psychology.

- 1 INTRODUCTION TO ZOOLOGY. (2-4) *Four hours. 1*
An examination of the structure and function of selected animal forms designed to give the general student a greater appreciation of the world of animals and man, and the science student a background for further study in zoology. Lectures, laboratory. *Mr. Rowell and Staff*
- 4 VERTEBRATE ZOOLOGY. (2-4) *Four hours. 11*
Survey of Phylum Chordata; structure and biology of vertebrate animals; dissection of typical submammalian vertebrates. Lectures, laboratory.
Prerequisite: 1. Mr. Bond and Staff
- 6 PRINCIPLES OF EVOLUTION. (3-2) *Four hours. 11*
Survey of biological principles connected with the development of life on the earth; evidences that evolution occurs; history of animal and human evolution; means by which evolution occurs. Lectures, laboratory.
Prerequisite: 1. Mr. Moody and Staff
- 21 ORGANIC EVOLUTION. (3-0) *Three hours. 1*
A course for students interested in biology's greatest generalization: the theory of evolution. Evidence of occurrence of organic evolution; history of animal life on the earth; evolution of man; principles of evolutionary change. A student may not receive credit for both 6 and 21.
Prerequisite: sophomore standing. Mr. Moody
- 31 GENERAL ENTOMOLOGY. (2-4) *Four hours. 1*
Introduction to the study of insects, with emphasis on morphology, physiology, and evolution. Lectures, laboratory.
Prerequisite: 1. Mr. Werner
- 52 PHYSIOLOGY. (3-0) *Three hours. 11*
Introduction to some chemical and mechanical fundamentals of animal physiology, with special reference to man.
Prerequisite: 1, junior standing; some knowledge of chemistry. Mr. Lochbead
- 101 COMPARATIVE ANATOMY. (2-4) *Four hours. 1*
Study of the evolution of the organ systems of vertebrates, accompanied by the dissection of a mammal. Lectures, laboratory.
Prerequisite: 4. Mr. Bond
- 102 PRIMATE ANATOMY. (0-8) *Four hours. 11*
Detailed dissection of the monkey. Laboratory.
Prerequisite: 101. Mr. Bond

- 105 COMPARATIVE HISTOLOGY. (2-4) *Four hours. I*
 Microscopic anatomy of selected invertebrate and vertebrate animals. Basic tissue similarities and specializations in relation to function. Lectures, laboratory.
Prerequisite: 4 and 101, 106, or Botany 112. *Mr. Rowell*
- 106 VERTEBRATE EMBRYOLOGY. (2-4) *Four hours. II*
 General principles of development of an ovum; comparisons of early organogenesis in frog, chick, and mammal. Lectures, laboratory.
Prerequisite: 4, junior standing. *Mr. Rowell*
- 108 INSECT ECOLOGY. (2-4) *Four hours. II*
 Relationship between insects and their environment, with emphasis on those of agricultural and medical importance. Lectures, laboratory, reports, field work.
Prerequisite: 31. *Mr. Werner*
- 110 INVERTEBRATE ZOOLOGY. (2-4) *Four hours. II*
 The anatomy, physiology, and life histories of selected representatives of the more important invertebrate phyla. Lectures, laboratory. Required of all students concentrating in zoology.
Prerequisite: 1, and 4 or 31. *Mr. Lochbead*
- G115 HEREDITY. (3-0) *Three hours. I*
 Principles of inheritance and their physical basis. (No student may receive credit both for this course and for Botany 101.)
Prerequisite: junior standing and four semesters of courses selected from botany, psychology, and zoology. *Mr. Moody*
- G116 HUMAN GENETICS. (3-0) *Three hours. II*
 Principles of human inheritance; population genetics; interaction of heredity and environment; application of principles of heredity to human problems on both individual and social levels.
Prerequisite: 115 or Botany 101. *Mr. Moody*
- G120 MODERN EVOLUTIONARY THEORY. (3-0) *Three hours. II*
 Contributions of modern research in genetics, systematics, distribution, experimental embryology, serology, and related fields to problems of the means and methods of evolutionary change.
Prerequisite: a course in evolution and one in heredity or genetics. *Mr. Moody*
- G191, 192 SEMINAR. (1-0) *One hour. I, II*
 Review and discussion of current zoological research. Required of graduate students and seniors concentrating in zoology; open to others by special permission only. *The Staff*

G201, 202 ADVANCED READINGS.

Credit as arranged

Readings, with conferences, to serve two objectives for graduate students: (1) to provide those working for the M.S. degree with background for, and specialized knowledge relating to, their research; (2) to provide those working for M.A. in Teaching and M.Ed. degrees with advanced study in phases of zoology in which formal courses are not available.

Prerequisite: graduate standing; an undergraduate major in Zoology.

G203, 204 RESEARCH.

Credit as arranged

Original investigation intended to culminate in a Master's thesis. Required of graduate students in zoology working for M.S.; not open to others.

The College of Technology

The College of Technology includes the Departments of Chemistry, Economics, Civil Engineering, Electrical Engineering, Mechanical Engineering, and Mathematics and Mechanics. It offers a number of specialized professional curricula in these fields, leading to the degree of Bachelor of Science in the field of specialization. Details are given in the sections immediately following.

THE CHEMISTRY CURRICULUM

The Department of Chemistry offers a specialized curriculum leading to the professional degree of Bachelor of Science in Chemistry. This curriculum is designed to give a sound basic training in Chemistry, to prepare the student for service in some branch of the chemical profession, and to qualify him adequately for advanced study in graduate school.

The department is accredited by the Committee for Professional Training of the American Chemical Society, which has established minimum requirements for the training of chemists at the bachelor's level. In accepting accreditation, the department has planned a curriculum which permits the student to reach these minimum objectives and will qualify the graduate for certification.

Those who wish a less intensive training in chemistry may take the Liberal Arts curriculum with a concentration in chemistry and receive the Bachelor of Arts degree. These students may also qualify for accreditation by satisfactorily completing certain courses beyond the minimum required for concentration, and *only those who so qualify will be recommended as chemists by the department*. A student can elect to concentrate in chemistry at the end of the freshman year or even as late as the end of the sophomore year and still qualify for accreditation. However, the department strongly recommends that the student choose before the start of his sophomore year. It will be glad to offer advice to any student interested in concentrating in chemistry.

In the first year, and to some degree in the second year, prescribed courses are such that a student can transfer into the curriculum from Liberal Arts, or vice versa.

The College of Technology

Below are listed the courses of study included in the Chemistry Curriculum:

FIRST YEAR	1st SEMESTER	2nd SEMESTER	SECOND YEAR	1st SEMESTER	2nd SEMESTER
General Chemistry	5	5	Quantitative Analysis	4	4
*English Composition	3	3	Sophomore English	3	3
Algebra, Trig., Anal. Geom.	5	5	Calculus	3	3
Elementary German	3	3	Intermediate German	3	3
Hygiene (Women)	(1)	(1)	General Physics	5	5
Military Science (Men)	2	2	Military Science (men)	2	2
Physical Education	(1)	(1)	Physical Education	(1)	(1)

THIRD YEAR	1st SEMESTER	2nd SEMESTER	FOURTH YEAR	1st SEMESTER	2nd SEMESTER
Physical Chemistry	5	5	Qualitative Organic Anal.	5	...
Organic Chemistry	5	5	Senior Research	2	4
Advanced Physics	3	3	†Advanced Organic Chem.	3	3
Approved Elective	3	3	†Advanced Physical Chem. ....	...	3
Junior Seminar	1	1	†Chemical Thermodynamics	3	...
			†Advanced Inorganic Chem.	3	3
			†Adv. Theoretical Anal. Chem. ...	3	...
			Senior Seminar	1	1
			Approved Elective	3	3
			‡Inorganic Preparations .....	...	2

* Students exempted from English Composition on the basis of the placement test must substitute another English course in its place.

† Six hours of courses chosen from these offerings are required each semester.

‡ Required of students deficient for accreditation in general chemistry laboratory.

THE MASTER'S DEGREE IN CHEMISTRY. The department offers work leading to the degree of Master of Science, the thesis problem being selected from the fields of inorganic, analytical, organic, or physical chemistry. Students who do not already have a reading knowledge of German must take German concurrently with their graduate work.

The normal outline of courses is as follows:

FIRST YEAR	1st SEMESTER	2nd SEMESTER	SECOND YEAR	1st SEMESTER	2nd SEMESTER
*Graduate Research	5	5	Graduate Research	5	5
*Advanced Chemistry	6	6	Advanced Chemistry	6	6
Seminar	1	1	Seminar	1	1

* Qualitative Organic Analysis and Chemical Thermodynamics required unless included in undergraduate training.

THE COMMERCE AND ECONOMICS CURRICULUM

The Department of Commerce and Economics offers a specialized curriculum, leading to the degree of Bachelor of Science in Commerce and Economics. Those who wish a less intensive or less specialized training in economics may take the Liberal Arts curriculum, with a concentration in economics, and receive the Bachelor of Arts degree. An advisor from

The Commerce and Economics Curriculum 75

the Economics faculty will assist students in building programs to meet their individual needs and plans.

The Commerce Curriculum is recommended for those who are preparing for a business career. It is intended to provide sound basic training in the various phases of business activity. The several options enable students to emphasize such specialized studies as accounting, banking, finance, insurance, government service, hotel and resort management, personnel management, production, sales management, and secretarial studies. The Department of Commerce and Economics cooperates with the Department of Mechanical Engineering in offering courses in the Management Engineering Curriculum. This curriculum is administered by the Department of Mechanical Engineering and is described in the section on engineering curricula.

The normal program for the first two years in the Commerce and Economics Curriculum is as follows:

THE FRESHMAN YEAR			THE SOPHOMORE YEAR		
	1st	2nd		1st	2nd
	SEMESTER			SEMESTER	
Ec. Geography or History	3	3	English or American or		
Social Framework of Cap.	3	...	World Lit.	3	3
Entrepreneurial Problems	3	3	Prin. of Economics	3	3
†English Composition	3	3	Prin. of Accounting	3	3
Algebra, Math. of Finance	3	3	General Psychology	3	3
*Foreign Language	3	3	Foreign Language, Calculus or		
Military Science (Men)	2	2	†American Government	3	3
Physical Education	(1)	(1)	Military Science (Men)	2	2
Hygiene (Women)	(1)	(1)	Physical Education	(1)	(1)

* In place of the foreign language students may choose Mathematics 11-12 and Calculus.
 † American Government should be elected by students who have completed the intermediate language requirement.

‡ Students exempted from English Composition on the basis of the placement test must substitute another English course in its place.

The freshman and sophomore year programs for students in the Hotel and Resort Management option is specialized.

During the junior and senior years, Commerce and Economic students normally choose one of the following options:

ACCOUNTING

THE JUNIOR YEAR			THE SENIOR YEAR		
	1st	2nd		1st	2nd
	SEMESTER			SEMESTER	
Advanced Accounting	3	3	Auditing	3	...
Financial Statement Anal.	3	...	Cost Accounting .....	...	3
Tax Accounting	3	3	Labor Economics	3	...
Money and Banking	3	3	C.P.A. Problems .....	...	3
†American Govt.	3	3	Corp. Finance & Invest.	3	3
Business Law	3	3	Laboratory Science	4-5	4-5
Non-professional Electives	3	3	Electives	3	3

† Students who have completed this course will enroll in an approved elective.

BANKING, FINANCE, AND INSURANCE

THE JUNIOR YEAR

	1st	2nd
	SEMESTER	
Money and Banking	3	3
Corp. Finance & Invest.	3	3
Economic Statistics	3	3
*American Govt.	3	3
Business Cycles	3	...
Professional Electives	3	3
Non-professional Electives	3	3

THE SENIOR YEAR

	1st	2nd
	SEMESTER	
Laboratory Science	4-5	4-5
Life Insurance	3	...
Property and Casualty Ins.	3	3
Tax. and Fiscal Policies	3	3
Business Law	3	3
Electives	3	3

BUSINESS ADMINISTRATION

THE JUNIOR YEAR

	1st	2nd
	SEMESTER	
Money and Banking	3	3
Corp. Finance & Invest.	3	3
Economic Statistics	3	3
*American Govt.	3	3
Prin. of Marketing	3	...
Small Bus. Operation	3	3
Non-professional Electives	3	3

THE SENIOR YEAR

	1st	2nd
	SEMESTER	
Laboratory Science	4-5	4-5
Business Law	3	3
Business Cycles	3	...
Tax. and Fiscal Policies	3	3
Electives	3	6

INDUSTRIAL MANAGEMENT

THE JUNIOR YEAR

	1st	2nd
	SEMESTER	
Labor Economics	3	...
Collective Bargaining	3	3
Industrial Organization	3	...
Personnel Management	3	3
Economic Statistics	3	3
*American Govt.	3	3
Prin. of Marketing	3	...
Industrial Purchasing	3	3
Non-professional Electives	3	3

THE SENIOR YEAR

	1st	2nd
	SEMESTER	
Laboratory Science	4-5	4-5
Time and Motion Study	4	...
Plant Organization	3	4
Business Law	3	3
Professional Electives	3	3
Non-professional Electives	3	3

MARKETING AND MERCHANDISING

THE JUNIOR YEAR

	1st	2nd
	SEMESTER	
Principles of Marketing	3	...
Industrial Purchasing	3	3
Money and Banking	3	3
Economic Statistics	3	3
*American Govt.	3	3
Professional Electives	3	3
Non-professional Electives	3	3

THE SENIOR YEAR

	1st	2nd
	SEMESTER	
Laboratory Science	4-5	4-5
†Personal Salesmanship	3	...
Small Bus. Operation	3	3
Sales Management	3	...
Advertising Prin. & Procedure....	3	3
Business Law	3	3
Electives	3	3

* Students who have completed this course will enroll in an approved elective.

† Retail Salesmanship may be substituted.

PERSONNEL MANAGEMENT

THE JUNIOR YEAR

1st 2nd
SEMESTER

Applied Psychology	3	...
Economic Statistics	3	3
Labor Economics	3	...
Collective Bargaining .....	...	3
*American Govt.	3	3
Industrial Organization	3	...
Personnel Management .....	...	3
Non-professional Electives	3	6

THE SENIOR YEAR

1st 2nd
SEMESTER

Personnel Administration	3	3
Laboratory Science	4-5	4-5
Business Law	3	3
Life Insurance	3	...
Consumption Economics .....	...	3
Time and Motion Study	4	...
Electives .....	...	3

SECRETARIAL STUDIES

THE JUNIOR YEAR

1st 2nd
SEMESTER

Business Correspondence	3	3
Elementary Typing	3	3
Elementary Shorthand	4	4
*American Govt.	3	3
Business Law	3	3
Non-professional Electives	3	3

THE SENIOR YEAR

1st 2nd
SEMESTER

Advanced Typing	3	3
Advanced Shorthand	4	4
Office Tech. & Machines	3	...
Office Management .....	...	3
Sec. Principles & Practice	3	3
Professional Electives	3	3
Non-professional Electives	3	3

* Students who have completed this course will enroll in an approved elective.

HOTEL AND RESORT MANAGEMENT

THE FRESHMAN YEAR

1st 2nd
SEMESTER

*English Composition	3	3
Social Framework of Cap.	3	...
Basic Speech	3	...
American Government	3	3
Algebra, Math. of Finance	3	3
Inorganic Chemistry .....	...	5
Hotel & Resort Mgt. Survey .....	...	2
Military Science (Men)	2	2
Physical Education	(1)	(1)

Practical Experience: Ten 40-hour weeks during summer required.

THE SOPHOMORE YEAR

1st 2nd
SEMESTER

English, American or World Lit.	3	3
Prin. of Economics	3	3
Organic Chemistry	5	...
Prin. of Accounting	3	3
Food Preparation	3	3
Entrepreneurial Problems .....	...	3
Military Science (Men)	2	2
Physical Education	(1)	(1)

Practical Experience: Ten 40-hour weeks during summer required.

* Students exempted from English Composition on the basis of the placement tests must substitute another English course in its place.

THE JUNIOR YEAR	1st	2nd	THE SENIOR YEAR	1st	2nd
	SEMESTER			SEMESTER	
Economic Statistics	3	...	Business Law	3	3
Taxation	3	...	Personnel Management	3	...
General Psychology	3	3	Real Estate .....	...	3
Property & Casualty Insurance .....	...	3	Labor Economics	3	...
Buying Textiles & Clothing	3	...	Advertising .....	...	3
Meal Planning & Service .....	...	3	Hotel & Resort Administration	3	...
Food Production .....	...	3	Hotel & Resort Problems .....	...	3
Hotel & Resort Equipment	3	...	Institution Marketing	2	...
Hotel & Resort Structures & Maint. ....	...	3	Institution Equipment .....	...	2
Electives	3	3	Electives	3	3

Practical Experience: Ten 40-hour weeks during summer required.

Special arrangements will be made for students attending ROTC Camp.

THE ENGINEERING CURRICULA

The engineering curricula are designed to help students learn how to approach and deal in a professional manner with problems and situations they will meet as engineers, citizens and individuals. In so doing, the curricula will assist them in preparing to continue to learn from experience and to grow in stature after graduation.

The Departments of Engineering offer instruction in four curricula, Civil, Electrical, Management, and Mechanical Engineering, each leading to the degree of Bachelor of Science in the field of specialization. Each curriculum includes the general subjects: mathematics, chemistry, physics, mechanical drawing, elements of electrical engineering, mechanics, hydraulics, economics, English, and contracts or business law.

All freshman and sophomore men are required to complete the two basic courses in Military Science for a total credit of eight semester hours, which become an integral part of the record and are counted toward graduation. Two years of Physical Education are required of all students.

An inspection trip is required of all engineering students in the junior year. This trip requires several days, and visits are made to plants in industrial centers in New England. The trip is required for graduation, but does not carry credit. The expense is borne by the student.

Students enrolled in the civil, electrical, and mechanical engineering curricula may become affiliated with their respective national professional engineering societies, the American Society of Civil Engineers, the American Institute of Electrical Engineers, and the American Society of Mechanical Engineers, as each of these organizations has authorized a student chapter at the University of Vermont. These student organizations sponsor frequent meetings, the purpose of which is to present an opportunity

for students to conduct activities similar to those conducted by members of the national societies. These activities include meetings at which technical papers are presented by students and by engineers who are actively engaged in the profession, attendance at conventions, and inspection trips, all of which provide helpful contact with engineering practice and also assist in the development of the qualities of leadership which are so essential for success in the engineering profession.

THE FRESHMAN YEAR

(For All Curricula)

* Students exempted from English Composition on the basis of the placement test must substitute another English course in its place.

	1st	2nd
	SEMESTER	
Freshman Math. (M.M. 11-12)	5	5
Gen'l Chemistry (Chem. 1-2)	5	5
Engrg. Drawing (M.E. 1-2)	3	3
*English Comp. (Engl. 1-2)	3	3
Military Science 1-2	2	2
Physical Education 1-2	(1)	(1)
	19	19

CIVIL ENGINEERING

THE SOPHOMORE YEAR

1st 2nd
SEMESTER

Calculus (M.M. 21-22)	3	3
Gen'l Physics (Phys. 11-12)	5	5
Expository Writing (Engl. 16)	3	...
Statics (M.M. 24)	...	3
Surveying (C. E. 51-52)	4	4
Military Science 3-4	2	2
Physical Education 11-12	(1)	(1)

18 18

Summer, Engineering Camp, 6 wks. 4

ELECTRICAL ENGINEERING

THE SOPHOMORE YEAR

1st 2nd
SEMESTER

Calculus (M.M. 21-22)	3	3
Gen'l Physics (Phys. 11-12)	5	5
Expository Writing (Engl. 16)	3	...
Elec. & Mag. Ccts. (E.E. 21)	...	5
D. C. Machines (E.E. 22)	...	5
Elect. Lab. I (E.E. 24)	...	1
Statics (M.M. 24)	...	3
Military Science 3-4	2	2
Physical Education 11-12	(1)	(1)

19 20

MANAGEMENT ENGINEERING MECHANICAL ENGINEERING

THE SOPHOMORE YEAR

1st 2nd
SEMESTER

Calculus (M.M. 21-22)	3	3
Gen'l Physics (Phys. 11-12)	5	5
Prin. of Econ. (Econ. 11-12)	3	3
Mfg. Processes (M.E. 51-52)	2	2
Elements of M.E. (M.E. 81)	3	...
Statics (M.M. 24)	...	3
Military Science 3-4	2	2
Physical Education 11-12	(1)	(1)

19 19

THE SOPHOMORE YEAR

1st 2nd
SEMESTER

Calculus (M.M. 21-22)	3	3
Gen'l Physics (Phys. 11-12)	5	5
Mfg. Processes (M.E. 51-52)	2	2
Expository Writing (Engl. 16)	3	...
Public Speaking (Speech 11)	...	3
Elements of M. E. (M.E. 81)	...	3
Statics (M.M. 24)	...	3
Military Science 3-4	2	2
Physical Education 11-12	(1)	(1)

19 19

CIVIL ENGINEERING

THE JUNIOR YEAR

1st 2nd
SEMESTER

Kinetics (M.M. 25)	3	3
Mech. of Materials (M.M. 131)	3	3
Prin. of Econ. (Econ. 11-12)	3	3
Elec. Circuits & Mach. (E.E. 101-2)	4	4
Elementary Structures I (C.E. 103)	3	3
Elementary Structures II (C.E. 104)	3	3
Engrg. Geology (Geol. 21)	3	3
Materials Lab. (C.E. 112)	2	2
Approved Elective	3	3

19 18

THE SENIOR YEAR

1st 2nd
SEMESTER

Hydraulics (C.E. 161)	3	3
Hydraulics Lab. (C.E. 163)	1	3
Struct. Design (C.E. 181-182)	3	3
Sanitary Engrg. (C.E. 165, 166)	3	3
Contracts (C.E. 151)	2	3
Highways Engrg. (C.E. 174)	3	3
Engrg. Constr. (C.E. 184)	3	3
Reinforced Concrete (C.E. 155)	3	3
Masonry Constr. (C.E. 156)	3	3
Approved Elective	3	3

18 18

ELECTRICAL ENGINEERING

THE JUNIOR YEAR

1st 2nd
SEMESTER

Diff. Equations (M.M. 111)	3	3
Kinetics (M.M. 25)	3	3
Mech. of Materials (M.M. 131)	3	3
A. C. Circuits (E.E. 103-104)	3	3
Electronics (E.E. 110)	4	4
Elect. Lab. II (E.E. 105-106)	1	1
*Prin. of Econ. (Econ. 11-12)	3	3
Thermodynamics (M.E. 113)	3	3
Power Engrg. (M.E. 116)	4	4

18 18

THE SENIOR YEAR

1st 2nd
SEMESTER

A. C. Machines (E.E. 107-108)	4	4
Communication Ccts. (E.E. 115)	4	3
Power Transmission (E.E. 113)	3	3
Elec. Lab. III (E.E. 111-112)	2	2
Public Speaking (Speech 11)	3	3
Metallurgy (M.E. 101) or Hydraulics (C.E. 161 & 163)	4	4
Contracts (C.E. 151)	2	3
Approved Electives	4	5

19 18

MANAGEMENT ENGINEERING

THE JUNIOR YEAR

1st 2nd
SEMESTER

Prin. of Accounting (Econ. 13-14)	3	3
Gen'l Psychology (Psych. 1-2)	3	3
Kinetics (M.M. 25)	3	3
Mechanics of Mat'ls (M.M. 131)	3	3
Indus. Metallurgy (M.E. 101)	4	4
Fluid Mechanics (M.E. 142)	4	4
Thermodynamics (M.E. 111)	4	4
Statistics (Econ. 187)	3	3
Expository Writing (Engl. 16)	3	3
Public Speaking (Speech 11)	3	3

20 19

THE SENIOR YEAR

1st 2nd
SEMESTER

Labor Economics (Econ. 141)	3	3
Collective Bargaining (Econ. 142)	3	3
Indust. Organization (Econ. 143)	3	3
Personnel Mang. (Econ. 144)	3	3
Business Law (Econ. 109)	3	3
Ec. Life & Govt. Control (Econ. 183)	3	3
Indust. Engrg. (M.E. 171)	3	3
Factory Plan. (M.E. 172)	3	3
Elec. Ccts. & Mach. (E.E. 101-102)	4	4
Parl. Procedure (Speech 3)	1	1
Electives	3	3

19 20

MECHANICAL ENGINEERING

THE JUNIOR YEAR		1st 2nd SEMESTER		THE SENIOR YEAR		1st 2nd SEMESTER	
Kinetics (M.M. 25)	3	...		Machine Design (M.E. 151, 152)	4	4	
Mechanics of Mat'ls (M.M. 131)	3			Power Plants (M.E. 161)	4	...	
Materials Lab. (C.E. 114)	...	1		Intern. Comb. Eng. (M.E. 164)	...	4	
Elec. Ccts. & Mach. (E.E. 101-2)	4	4		Indust. Engrg. (M.E. 171) or	3	...	
Indus. Metallurgy (M.E. 101)	4	...		Air Conditioning (M.E. 181)	4	...	
Kinematics (M.E. 132)	...	4		Factory Plan. (M.E. 172) or	...	3	
Thermodynamics (M.E. 111)	4	...		Aerodynamics (M.E. 182)	...	3	
Fluid Mechanics (M.E. 142)	...	4		Contracts (C.E. 151)	2	...	
*Prin. of Econ. (Econ. 11-12)	3	3		Seminar (M.E. 192)	...	2	
M. E. Lab. (M.E. 143)	1	...		Electives	6	6	
						19-20	19
		19	19				

* This course may be deferred until the Senior year for those students electing Advanced Military Science.

COURSES OF INSTRUCTION

CHEMISTRY

*Professor Braun; Associate Professor *Crooks, Gregg and Smith;
Assistant Professors C. L. Brown, G. H. Brown, Long and Lucarini*

SPECIAL REQUIREMENTS FOR CONCENTRATION (LIBERAL ARTS CURRICULUM): Satisfactory completion of General Chemistry, Elementary Quantitative Analysis, Organic Chemistry, Physical Chemistry, and the junior and senior seminars. No advanced related course is required. Those who wish to qualify for accreditation by the American Chemical Society must take additional courses, and only those who so qualify will be recommended by the department as chemists.

FEES. The tuition fees cover ordinary breakage and the cost of reagents used. For extraordinary breakage, such as Beckmann thermometers, and damage to instruments, separate charges are made.

* On military leave.

1-2 GENERAL CHEMISTRY. (3-6)*

*Five hours. I, II

Lectures, recitations, and laboratory, including general experiments and elementary qualitative analysis.

Prerequisite: one year of high school mathematics.

The Staff

4 OUTLINE OF INORGANIC CHEMISTRY. (3-4)

Five hours. II

An introduction to inorganic chemistry, primarily for students in Agriculture, Home Economics, and Nursing, as a foundation for Chemistry 35. Lectures, recitation, laboratory. (Not offered after 1950-51.)

Prerequisite: one year of high school mathematics.

Mr. Brown

Note: Effective September, 1951, two first-year courses will be offered:

1-2 INTRODUCTORY CHEMISTRY. (3-3).

Four hours. I, II

An introductory course in general inorganic chemistry. Lectures, recitations, and laboratory. Acceptable by the department as a pre-requisite to advanced courses.

Prerequisite: one year of high school mathematics.

The Staff

11-12 GENERAL CHEMISTRY. (3-6).

Five hours. I, II

Lectures, recitation, and laboratory, including general experiments and elementary qualitative analysis. Required of engineering students and recommended for those concentrating in science.

Prerequisite: one year of high school mathematics.

The Staff

21-22 ELEMENTARY QUANTITATIVE ANALYSIS. (2-6)† Four hours. I, II

Introduction to the theory and practice of quantitative methods, both gravimetric and volumetric, including also a theoretical discussion of indicators, buffers, and pH.

Prerequisite: 1-2.

Mr. Long

31-32 ORGANIC CHEMISTRY. (3-6)*

*Five hours. I, II

Basic organic chemistry for chemistry majors, premedical students, and those concentrating in the biological and physical sciences.

Prerequisite: 1-2; 21-22 recommended.

Messrs. Braun and Gregg

* May be taken by certain students for four hours credit, with only one three-hour laboratory period.

† May be taken by certain students for three hours credit, with only one three-hour laboratory period.

- 35 OUTLINE OF ORGANIC CHEMISTRY. (3-4) *Five hours. 1*
An introduction to organic chemistry, primarily for students in Agriculture, Home Economics, and Nursing.
Prerequisite: 1-2 or 4. *Mr. Brown*

- 41-42 PHYSICAL CHEMISTRY. (3-6)* **Five hours. 1, II*
Introduction to the kinetic theory and its application to gases; thermodynamics and the application to liquids and solutions; chemical equilibria; fundamentals of electrochemistry and atomic structure.
Prerequisite: 21-22; General Physics; Calculus. *Mr. Smith*

ADVANCED INORGANIC CHEMISTRY

- G101 NON-AQUEOUS SYSTEMS. (3-0) *Three hours. 1*
Study of solvents other than water, with special emphasis on the ammonia system.
Prerequisite: 41-42. *Mr. Gregg*

- G102 LESS FAMILIAR ELEMENTS. (3-0) *Three hours. II*
A detailed study of the rarer elements and their significance.
Prerequisite: 41-42. *Mr. Gregg*

- 108 INORGANIC PREPARATIONS. (0-6) *Two hours. II*
Laboratory preparations of inorganic compounds.
Prerequisite: 1-2. *Mr. Brown*

ADVANCED ANALYTICAL CHEMISTRY

- G121 ADVANCED THEORETICAL ANALYTICAL CHEMISTRY. (3-0) *Three hours. 1*
Discussion of pH, buffers, solubility product, and ionic equilibria. Analysis of anions and of the less familiar elements. Considerable material on physico-chemical methods, including electrodeposition, polarography, microscopy, and chromatography.
Prerequisite: 41-42. *Mr. Long*

ADVANCED ORGANIC CHEMISTRY

- G130 CHEMISTRY OF THE CARBOHYDRATES. (3-0) *Three hours. II*
Detailed description of the chemistry of the more common carbohydrates, including proofs of structure. (Offered in alternate years. 1950-51.)
Prerequisite: 31-32; credit or concurrent enrollment in 41-42. *Mr. Braun*

* May be taken without the laboratory work for three hours credit by permission of the department.

G131, 132 SPECIAL TOPICS. (3-0) *Three hours. I, II*

Detailed discussion of specific groups of organic compounds, *i.e.* sterids, heterocyclic compounds, terpenes, proteins, carbohydrates, vitamins, hormones, etc. (Offered in alternate years, 1950-51.)

Prerequisite: 31-32; credit or concurrent enrollment in 41-42.

Mr. Gregg

G133, 134 PHYSICAL ORGANIC. (3-0) *Three hours. I, II*

Physical organic chemistry, with emphasis on structural aspects and reaction mechanisms. (Offered in alternate years, 1951-52.)

Prerequisite: 31-32; 41-42.

Mr. Gregg

G136 CHEMISTRY OF HETEROCYCLIC COMPOUNDS. (3-0)

Three hours. II

The chemistry of the more common heterocyclic compounds. (Offered in alternate years, 1951-52.)

Prerequisite: 31-32; credit or concurrent enrollment in 41-42.

Mr. Braun

G137 QUALITATIVE ORGANIC ANALYSIS. (3-8) *Five hours. I*

Characterization and identification of organic compounds, including compounds in mixtures.

Prerequisite: 31-32; credit or concurrent enrollment in 41-42.

Mr. Braun

ADVANCED PHYSICAL CHEMISTRY

G141 CHEMICAL THERMODYNAMICS. (3-0) *Three hours. I*

A systematic study of the application of thermodynamics in the solution of chemical problems.

Prerequisite: 31-32; 41-42.

Mr. Smith

G142 CHEMICAL KINETICS. (3-0) *Three hours. II*

The velocity of chemical reactions in both homogeneous and heterogeneous systems.

Prerequisite: 41-42.

Mr. Long

G144 PHASE RULE. (3-0) *Three hours. II*

Heterogeneous equilibrium in one, two, and three component systems. (Offered in alternate years, 1949-50.)

Prerequisite: 41-42.

Mr. Smith

151-152 JUNIOR SEMINAR. (2-0) *One hour. I, II*153-154 SENIOR SEMINAR. (2-0) *One hour. I, II*

197-198 SENIOR RESEARCH. (0-6, 0-12) *Two hours. I. Four hours. II*

The students elect a field for special study in organic, analytical, physical, or organic chemistry, works under the direction of a staff member, and submits his findings in written form, suitably bound, to the department to be filed. Required of seniors in the Chemistry Curriculum. *The Staff*

G251-252 GRADUATE SEMINAR. (2-0) *One hour. I, II*

Student reports on current research papers appearing in English and German. Required of graduate students in chemistry and of juniors and seniors concentrating in chemistry. *The Staff*

G297-298 GRADUATE RESEARCH. *Five hours. I, II*

Graduate students complete a research problem and submit the results in written form to the department. Three copies, suitably bound, are required. *The Staff*

For AGRICULTURAL BIOCHEMISTRY, see the College of Agriculture.

COMMERCE AND ECONOMICS

Professor Lobman; Associate Professors Briggs, Knollmeyer, Nulty, and Woodard; Assistant Professors Carse, Donabue, Escolas, Greif, Maybury, Riccardi, and White; Messrs. Farrand, Griffin, Petersen, Van Nostrand, Wick, and Mrs. Bister

SPECIAL REQUIREMENTS FOR CONCENTRATION (LIBERAL ARTS CURRICULUM): Courses in economics totalling at least twenty-four semester hours, including twelve or more of advanced grade. The related courses are chosen in consultation with the departmental advisor on the basis of the student's individual needs and plans.

*1-2 ECONOMIC GEOGRAPHY. *Three hours. I, II*

Geography as a basis for economic development; importance of resources to production, exchange, consumption, population, and national economies. *Miss Woodard*

*5, 6 ECONOMIC HISTORY OF THE UNITED STATES. *Three hours. I, II*

The economic development of the United States from colonial times to the present as a basis for an understanding of our present economic problems. *Miss Woodard and Mr. White*

9 SOCIAL FRAMEWORK OF CAPITALISM. *Three hours. I*

The institutional framework of the American economy with emphasis upon private property, competition, the price regulatory system, free enterprise, and their relationship to the national product. *Mr. Donabue*

* Courses accepted for credit in the College of Arts and Sciences.

10 ENTREPRENEURIAL PROBLEMS.

Three hours. II

Entrepreneurial behavior within the institutional framework of capitalism with emphasis upon business policies, organization, facilities, and techniques.

Prerequisite: 9.

Mr. Donahue

*11-12 PRINCIPLES OF ECONOMICS.

Three hours. I, II

Fundamental economic principles as an aid to the understanding of modern economic society.

Prerequisite: sophomore standing.

The Staff

*13-14 PRINCIPLES OF ACCOUNTING.

Three hours. I, II

An elementary course in the problems of the financial control of business, with the necessary practice work.

Prerequisite: sophomore standing.

Messrs. Briggs and Griffin

31 ENGINEERING ACCOUNTING.

Three hours. II

A course emphasizing cost and depreciation accounting, designed primarily to meet the needs of the engineer.

Mr. Briggs

49 GENERAL TYPING.

Two hours. I and II

Instruction in correct technique; mastery of the keyboard; practice to attain typing proficiency. Fee \$22.50 per semester. *Not open to secretarial or business education students.*

Mrs. Bister

65-66 BUSINESS CORRESPONDENCE.

Three hours. I, II

Instruction and practice in writing business letters and reports.

Mrs. Maybury

BANKING, FINANCE, AND INSURANCE

*G101-102 MONEY AND BANKING.

Three hours. I, II

The functions of money, credit, and banking in modern economic society. The theory of the internal and external value of money; the control of the money market; interrelationship of monetary and fiscal policies and their effects upon national and international price movements.

Prerequisite: 11-12.

Messrs. Carse and Lobman

*G103 ECONOMICS OF TAXATION.

Three hours. I

Revenues and expenditures of federal, state, and local governments and their effects upon individuals, business institutions, and the national economy.

Prerequisite: 11-12.

Mr. Knollmeyer

* Courses accepted for credit in the College of Arts and Sciences.

*G104 FISCAL POLICIES.

Three hours. II

Theories underlying national fiscal policies. An analysis of national debt management and of the proposals to control cyclical fluctuations.

Prerequisites: 103 and 193.

Mr. Knollmeyer

*105 INTERNATIONAL TRADE AND FINANCE.

Three hours. I

Theory of international values, mechanism of adjustment of international balances, foreign exchange-theory, the international aspects of monetary and banking theory, and tariff theory.

Prerequisite: 101-102.

Mr. Lobman

G107 CORPORATION FINANCE.

Three hours. I

A comparison of the various types of business forms with chief attention to the financing of corporations.

Prerequisite: 11-12 and 13-14.

Mr. Ricciardi

G108 INVESTMENTS.

Three hours. II

A study of the various media of investments and of the operation of financial institutions. Special consideration to an investment analysis of industrials, financial institutions, public utilities, and railroads. Practical application of available statistical and accounting tools.

Prerequisite: 107.

Mr. Ricciardi

109-110 BUSINESS LAW.

Three hours. I, II

First semester: a survey of the American system of law with particular reference to some of the fundamental legal concepts relating to business, especially as found in the law of contracts, sales, bailments, and negotiable instruments. Second semester: a continuation of the study of the legal aspects of business with specific reference to the law of agency, partnerships, and corporations.

Prerequisite: 11-12.

Mr. Wick

111 ECONOMICS OF LIFE INSURANCE.

Three hours. I

Types of life insurance contracts and their application; premium and reserve computation, social security and other forms of life insurance.

Prerequisite: 11-12 and 13-14.

Mr. Ricciardi

112 PROPERTY AND CASUALTY INSURANCE.

Three hours. II

The principles underlying property and casualty insurance.

Prerequisite: 11-12 and 13-14.

Mr. Ricciardi

113 URBAN AND INDUSTRIAL LAND ECONOMICS.

Three hours. I

Economic principles underlying the utilization and conservation of urban and industrial land resources.

Prerequisite: 11-12.

* Courses accepted for credit in the College of Arts and Sciences.

114 REAL ESTATE.

Three hours. II

The principles underlying the leasing, purchasing, selling, valuation, and financing of real estate for personal and business uses.

Prerequisite: 11-12 and 13-14.

HOTEL AND RESORT MANAGEMENT

4 HOTEL AND RESORT MANAGEMENT SURVEY.

Two hours. II

Introduction to hotel and resort management and its various aspects.

Mr. Van Nostrand

166 HOTEL AND RESORT EQUIPMENT.

Three hours. I

A study of various types of hotel and resort equipment, their operation and application.

Prerequisite: Economics 4.

167 HOTEL AND RESORT STRUCTURES AND MAINTENANCE.

Three hours. II

Materials and methods of building construction, repair and maintenance. Specification and repair of hotel and resort fixtures and furniture.

Prerequisite: 166.

177 HOTEL AND RESORT ADMINISTRATION.

Three hours. I

The study of hotel and resort organization and administration.

Prerequisite: 166 and 167.

178 HOTEL AND RESORT PROBLEMS.

Three hours. II

A study of the specific problems arising in the management and operation of hotels and resorts.

Prerequisite: 177.

MARKETING AND MERCHANDISING

121 PRINCIPLES OF MARKETING.

Three hours. I

The place of marketing in our economy. An intensive analysis of the marketing structure by functions, institutions, and commodities.

Prerequisite: 11-12.

Mr. Greif

122 INDUSTRIAL PURCHASING.

Three hours. II

Organization, operation, scope and place of the purchasing department in company organization. Policies, quality and inspection, quantity, price, sources, budgets and records.

Prerequisite: 121.

Mr. Greif

†123 PERSONAL SALESMANSHIP.

Three hours. I

A practical approach through class participation and individual demonstration to modern salesmanship, emphasizing the approach to, presentation and close of the sale.

Prerequisite: 121.

Mr. Greif

†124 RETAIL SALESMANSHIP.

Three hours. II

The principles of selling as applied to retail operations. Competency for future supervision is developed. Demonstration sales. Analyses of practical selling situations.

Prerequisite: 121.

Mr. Greif

126 OPERATION OF SMALL BUSINESS AND SERVICE ESTABLISHMENTS.

Three hours. II

A practical consideration of how the individual establishing his own business meets the problems of finance, location, display, merchandising, promotion and control. Individual project development.

Prerequisite: 121.

Mr. Greif

131 SALES MANAGEMENT.

Three hours. I

The new and established trends of the sales manager's job. Method of selection, training, testing, compensation and control, including marketing policies and the coordination of related departmental functions.

Prerequisite: 121.

Mr. Greif

132 FUNDAMENTALS OF ADVERTISING.

Three hours. II

Advertising as an economic and social influence. A study of principles and techniques of copy preparation, media of selection and advertising activities. Students will receive practice in preparation of advertising copy and layout.

Prerequisite: 121.

Mr. Greif

INDUSTRIAL AND PERSONNEL MANAGEMENT

*141 LABOR ECONOMICS.

Three hours. I

History of the American labor movement; objectives, policies, and tactics of labor unions; public policy with respect to labor organizations.

Prerequisite: 11-12.

Mr. White

*G142 COLLECTIVE BARGAINING.

Three hours. II

The collective labor agreement; techniques of the bargaining process; arbitration; the administration of the labor contract.

Prerequisite: 141.

Mr. White

* Courses accepted for credit in the College of Arts and Sciences.

† Only one course in Salesmanship may be taken for credit.

143 INDUSTRIAL ORGANIZATION AND MANAGEMENT. *Three hours. I*

Organization of manufacturing plant and plant managerial problems. Types of operation, use of standards, plant location and layout. Survey of production control; routing, scheduling, methods analysis, and quality control. Field trips to factories.

Prerequisite: 11-12.

Mr. Donahue

144 PERSONNEL MANAGEMENT. *Three hours. II*

The human factor in production; evaluation of means of attaining worker-management cooperation; the influence of social groups and human attitudes at the work level; the nature and functioning of collective bargaining.

Prerequisite: 143.

Mr. Donahue

G151-152 PERSONNEL ADMINISTRATION. *Three hours. I, II*

Functions and objectives of a personnel department; instruments of control testing, and safety; incentive plans; placement, selection, and interviewing techniques. Field trips to factories, stores, and offices.

Prerequisite: 142 and 144.

Mr. White

Students in Industrial and Personnel Management also take in the senior year the two following courses given in the department of Mechanical Engineering. For descriptions see "Engineering, Mechanical."

175 TIME AND MOTION STUDY. *Four hours. I*

Four hours. I

176 PLANT ORGANIZATION. *Four hours. II*

Four hours. II

ACCOUNTING**161-162 ADVANCED ACCOUNTING. *Three hours. I, II***

Three hours. I, II

Advanced valuation problems in the financial control of business.

Prerequisite: 13-14.

Mr. Briggs

163 FINANCIAL STATEMENT ANALYSIS. *Three hours. I*

Three hours. I

Preparation and analysis of the more common types of accounting statements.

Prerequisite: 13-14.

Mr. Briggs

164 TAX ACCOUNTING. *Three hours. II*

Three hours. II

The technical and accounting aspects of the income, estate, gift, and excise tax laws.

Prerequisite: 13-14.

Mr. Briggs

G171 AUDITING. *Three hours. I*

Three hours. I

The theory and practice of auditing, types of audits, audit procedures, working papers, and reports.

Prerequisite: 161-162.

Mr. Briggs

G172 COST ACCOUNTING.

Three hours. II

A thorough consideration of the basic principles of cost accounting and their practical application.

Prerequisite: 161-162.

Mr. Briggs

G176 C. P. A. PROBLEMS.

Three hours. II

Accounting theory and practice for those interested in professional accounting.

Prerequisite: 161-162.

Mr. Briggs

ECONOMICS

*181 TRANSPORTATION.

Three hours. I

Social and economic aspects of the transportation problem as revealed by an analysis of the nature, history, and problems of the various transportation agencies of the United States.

Prerequisite: 11-12; Political Science 1, 2.

Mr. Lobman

*182 PUBLIC UTILITIES.

Three hours. II

The economics of public utility enterprise with special reference to franchises, capital structure, valuation, rate making, and governmental regulation.

Prerequisite: 11-12.

Mr. Escolas

*183 ECONOMIC LIFE AND GOVERNMENT CONTROL.

Three hours. I

A study of the economic causes and consequences of government regulation and control of business activities.

Prerequisite: 11-12; Political Science, 1, 2.

Mr. Escolas

*184 THE ECONOMICS OF CONSUMPTION.

Three hours. II

Consumption and consumers' choice; their relationship to the modern exchange economy; measurements of consumption; methods proposed for the increase and diversification of consumption.

Prerequisite: 11-12.

Mr. Escolas

*G185-186 INTERMEDIATE ECONOMIC ANALYSIS.

Three hours. I, II

An analysis of consumer demand, imperfect and monopolistic competition, equilibrium theory, and the determination of distributive shares.

Prerequisite: 11-12.

Mr. Petersen

*187-188 ECONOMIC STATISTICS.

Three hours. I, II

The theory and interpretation of statistics; laboratory exercises in the uses of statistical techniques and in the application of statistical tools to economic problems.

Prerequisite: 11-12; Math. 1 and 4.

Mr. Knollmeyer

* Courses accepted for credit in the College of Arts and Sciences.

189 ECONOMICS OF NATIONAL SECURITY.Three hours. I*

The scope and nature of the economic problems which have arisen from our country's anti-aggression policy.

Prerequisite: 11-12.

G192 INTERNATIONAL ECONOMIC PROBLEMS AND POLICIES.Three hours. II*

Important aspects of international cooperation and conflict in the economic sphere; the quest for foreign markets, raw materials, investment opportunities, and population outlets.

Prerequisite: 105.

*Mr. Lobman****G193 BUSINESS CYCLE THEORY.***Three hours. I*

The pattern of cyclical fluctuations; analysis of the major theories of business cycles.

Prerequisite: 101-102 and 187-188.

*Mr. Escolas****G195 HISTORY OF ECONOMIC THOUGHT.***Three hours. I*

The development of economic ideas from classical antiquity to modern times, with emphasis on the Classical, Historical, Socialist, Optimist, Marginalist, and Neoclassical Schools.

Prerequisite: 185-186 or consent of instructor.

*Mr. Petersen****G196 MODERN ECONOMIC THOUGHT.***Three hours. II*

A survey of the leading 20th Century economists and their doctrines, including studies of J. B. Clark, Thorstein Veblen, Alfred Marshall, W. C. Mitchell, J. A. Hobson, J. M. Keynes, J. R. Hicks, and others.

Prerequisite: 195.

*Mr. Petersen****G197, 198 SEMINAR.***Three hours. I, II*

Designed for students concentrating in the department. Review of recent books and periodical literature; discussions of topics of contemporaneous interest; student reports based upon personal investigation.

Prerequisite: senior standing; consent of the chairman.

*Mr. Lobman***G201-202 RESEARCH.***I, II*

A course designed to meet the special research problems of advanced undergraduate and graduate students. Consent of the department required.

*The Staff***SECRETARIAL STUDIES****53-54 ELEMENTARY SHORTHAND.***Four hours. I, II*

Instruction in the fundamental principles of Gregg Shorthand. Dictation and transcription of business letters.

Miss Nulty

* Courses accepted for credit in the College of Arts and Sciences.

55-56 ADVANCED SHORTHAND.

Four hours. I, II

Dictation covering a broad business vocabulary and a variety of literary and technical subject-matter. Emphasis on speed in taking dictation and transcribing.

Prerequisite: 53-54.

Miss Nulty

59-60 ELEMENTARY TYPEWRITING.

Three hours. I, II

Instruction in the care of the typewriter; correct technique; mastery of the keyboard; practice in variety of forms of material.

Mrs. Bister

61-62 ADVANCED TYPEWRITING.

Three hours. I, II

Development of typing speed; projects covering the different kinds of commercial typing; transcription of shorthand notes.

Prerequisite: 59-60.

Mrs. Maybury

69 OFFICE TECHNIQUES AND MACHINES.

Three hours. I

Use, care, and operation of office machines with emphasis on dictating and transcribing, duplicating, and calculating machines. Modern filing systems are studied with actual practice in business filing.

Prerequisite: senior standing.

Mrs. Maybury

70 OFFICE MANAGEMENT.

Three hours. II

Organization and supervision of office activities from the standpoint of the office manager; selection and training of personnel, production standards, as well as office forms, systems, equipment and supplies, office manuals, and physical aspects of office planning and layout.

Prerequisite: senior standing.

Mrs. Maybury

71-72 SECRETARIAL PRINCIPLES AND PRACTICE.

Three hours. I, II

Qualifications and practical training in the duties required of a secretary, including use of business and legal forms, interviewing business callers, reporting conferences, and keeping business calendars. Practical dictation and transcription are included.

Prerequisite: senior standing.

Mrs. Maybury

ENGINEERING, CIVIL

Professor Puffer; Associate Professor Milbank; Assistant Professor Koerner; Messrs. Johnson and Root

51-52 SURVEYING. (3-4)

Four hours. I, II

51 Plane and topographic surveying.

52 Route surveying; theory of curves, earthwork calculations, photogrammetry.

Prerequisite: Trigonometry.

- 54 ENGINEERING CAMP. *Four hours. Summer*
Six weeks summer field practice in practical surveying between sophomore and junior years.
- 103 ELEMENTARY STRUCTURES I. (0-6) *Three hours. I*
Determination of stresses in simple framed structures.
Prerequisite: Statics (M.M. 24).
- 104 ELEMENTARY STRUCTURES II. (0-6) *Three hours. II*
Theory and design of simple framed structures.
Prerequisite: 103 and Mechanics of Materials (M.M. 131).
- 112 MATERIALS LABORATORY. (0-4) *Two hours. II*
Testing of engineering materials and soils.
Prerequisite: Mechanics of Materials (M.M. 131).
- 114 MATERIALS LABORATORY FOR MECHANICAL ENGINEERING STUDENTS. (0-2) *One hour. II*
Testing of engineering materials.
Prerequisite: Mechanics of Materials (M.M. 131).
- 151 CONTRACTS. (2-0) *Two hours. I*
Study of contract law from the engineering point of view.
- 155 REINFORCED CONCRETE. (0-6) *Three hours. I*
Elementary theory and design of reinforced concrete structures.
Prerequisite: Mechanics of Materials (M.M. 131).
- 156 MASONRY CONSTRUCTION. (0-6) *Three hours. II*
Advanced theory and design of reinforced concrete structures.
Prerequisite: 155.
- G157 BUILDING CONSTRUCTION. (3-0) *Three hours. I or II*
Practical building construction in various materials. Elective course.
Prerequisite: 104.
- 161 HYDRAULICS. (3-0) *Three hours. I*
The mechanics of liquids; hydraulic machinery.
Prerequisite: Statics and Kinetics (M.M. 24, 25).
- 163 HYDRAULICS LABORATORY. (0-3) *One hour. I*
Given in conjunction with 161.
- G164 WATER POWER ENGINEERING. (3-0) *Three hours. I or II*
The study of water power development. Elective course.
Prerequisite: 161.
- 165, 166 SANITARY ENGINEERING. (3-0) *Three hours. I, II*
- 165 Design, construction, maintenance and operation of public water supplies.
166 Design, construction, maintenance and operation of sewerage systems and sewage treatment plants.

- 174 HIGHWAY ENGINEERING. (3-0) *Three hours. II*
 Design, construction, and maintenance of modern highways.
Prerequisite: Mechanics of Materials (M.M. 131).
- 181-182 STRUCTURAL DESIGN. (0-6) *Three hours. I, II*
 Advanced theory and design of framed structures.
Prerequisite: 104.
- G183 INDETERMINATE STRUCTURES. (3-0) *Three hours. I or II*
 Determination of stresses and consideration of designs for various types of indeterminate structures. An elective course.
Prerequisite: 104.
- 184 ENGINEERING CONSTRUCTION. (3-0) *Three hours. II*
 Foundations of structures, characteristics of soils, tunnelling, and construction methods.
Prerequisite: Mechanics of Materials (M.M. 131).

ENGINEERING, ELECTRICAL

*Professor McKee; Associate Professors Hoilman, Mosher and Smith;
 Assistant Professor Shorey; Messrs. Ksiazek and Hayles*

- 21 ELECTRIC AND MAGNETIC CIRCUITS. (5-0) *Five hours. I*
Prerequisite: credit or enrollment in Math. 21.
- 22 DIRECT CURRENT MACHINES. (5-0) *Five hours. II*
Prerequisite: 21.
- 24 ELECTRICAL LABORATORY I. (0-3) *One hour. II*
Prerequisite: 21.
- 101-102 ELECTRICAL CIRCUITS AND MACHINES. (3-3) *Four hours. I, II*
Prerequisite: Math. 22; Physics 11-12.
- 103-104 ALTERNATING CURRENT CIRCUITS. (5-0, 3-0)
Five hours. I. Three hours. II
Prerequisite: 21; Math. 22.
- 105-106 ELECTRICAL LABORATORY II. (0-3) *One hour. I, II*
Prerequisite: 22, 24; credit or enrollment in 104 for 106.
- 107-108 ALTERNATING CURRENT MACHINES. (4-0) *Four hours. I, II*
Prerequisite: 104.
- 110 ELECTRONICS. (3-3) *Four hours. II*
Prerequisite: 102 or 103.

- 111-112 ELECTRICAL LABORATORY III. (0-6) *Two hours. I, II*
Prerequisite: 106 and credit or enrollment in 107-108.
- 113 POWER TRANSMISSION. (3-0) *Three hours. I*
Prerequisite: 104.
- 115 COMMUNICATION CIRCUITS. (3-3) *Four hours. I*
Long lines in steady state, networks, and loading.
Prerequisite: 104.
- G117 INDUSTRIAL ELECTRONICS. (3-3) *Four hours. I*
A continuation of 110, with emphasis on control and power applications.
Prerequisite: 110.
- 118 POWER STATIONS. (3-0) *Three hours. II*
The electrical engineering features of steam, water, and oil engine power plants.
Prerequisite: 107 or 102.
- G120 TRANSIENT PHENOMENA. (3-3) *Four hours. II*
The mathematical development of common voltage and current transients with experimental check by means of the oscillograph.
Prerequisite: 104.
- 121-122 RADIO COMMUNICATION. (3-3) *Four hours. I, II*
Fundamental principles of radio transmitting and receiving systems.
Prerequisite: 104, 110.
- G123, 124 SPECIAL TOPICS. (2-3) *Three hours. I, II*
Formulation and solution of theoretical and practical problems dealing with electrical circuits, apparatus, machines, or systems.
Prerequisite: 22, 104.
- G126 POWER SYSTEMS. (3-0) *Three hours. II*
Machine transients, transient stability of power systems, wave propagation, lightning, and relaying.
Prerequisite: 113.
- G128 U. H. F. CIRCUITS. (3-3) *Four hours. II*
Circuits and techniques for use at ultra-high frequencies.
Prerequisite: 121.
- 129-130 GENERAL ELECTRICAL ENGINEERING. (3-3) *Four hours. I, II*
Courses in circuits and machines adapted to the needs of Agricultural Engineers.
Prerequisite: Physics 11-12; Math. 11-12.

ENGINEERING, MECHANICAL

Associate Professor Sidle; Assistant Professors Duchacek, †Hopkinson, Paquet, Tutbill; Messrs. Carpenter, Johnson, Kenfield, Marshall, and Thomson

1-2 ENGINEERING DRAWING. (0-9)

Three hours. I, II

- 1 Principles and practice in use of drawing equipment; freehand lettering and sketching; geometric constructions; orthographic projection; dimensioning; sections, conventions, and auxiliary views; piping, welding and electrical symbols; ink tracing; charts and graphs.
- 2 Fundamentals of descriptive geometry; theoretical and practical approach to pictorial drawing (isometric, dimetric, trimetric, oblique, perspective); working drawings; intersections and developments.

51-52 MANUFACTURING PROCESSES. (1-3)

Two hours. I, II

- 51 Principles of metal machining.
- 52 Advanced machining; casting; welding; methods, jigs, fixtures, tooling, and gauges for interchangeable manufacturing.

Prerequisite: 2.

81 ELEMENTS OF MECHANICAL ENGINEERING. (2-3)

Three hours. I

An introductory course in engineering problems and power generation machinery. Laboratory work on mechanical measurements.

Prerequisite: Chemistry 2.

101 INDUSTRIAL METALLURGY. (3-3)

Four hours. I, II

The fundamentals of ferrous and non-ferrous physical metallurgy; correlation of metallographic structure and physical properties with heat-treatment and with the uses of alloys.

Prerequisite: Chemistry 2; Physics 12.

111 THERMODYNAMICS. (3-3)

Four hours. I

The fundamental principles of engineering thermodynamics and the application of these principles to thermodynamic cycles, prime movers, compressors, refrigeration, and heat transfer. Primarily for mechanical engineering students.

Prerequisite: 81; Physics 11; Math.-Mech. 22, and concurrent enrollment in Math.-Mech. 25.

113 THERMODYNAMICS FOR ELECTRICAL ENGINEERING STUDENTS.

(3-0)

Three hours. I

The fundamental principles of engineering thermodynamics and the application of these principles to thermodynamic cycles, prime movers, compressors, and heat transfer. Primarily for electrical engineering students.

Prerequisite: Physics 11; Math. 22, and concurrent enrollment in Math.-Mech. 25.

† On leave, 1950-51.

116 POWER ENGINEERING. (3-3) *Four hours. II*

A short course in the fields of steam and internal combustion engine power. Mechanical, thermodynamic, and economic analysis of the design, operation, and performance of characteristic equipment and stations.

Prerequisite: 111 or 113.

132 KINEMATICS. (3-3) *Four hours. II*

The analysis of displacements, velocities, and acceleration in machines and the application of such analysis to cams, gears, and other mechanisms.

Prerequisite: 2; Math.-Mech. 25.

142 FLUID MECHANICS. (3-3) *Four hours. II*

The mechanics of fluids at rest and in motion.

Prerequisite: 111 or 113; Math.-Mech. 25.

143 MECHANICAL ENGINEERING LABORATORY. (0-3) *One hour. I*

Experiments to verify thermodynamic principles. Lubricant tests, and calorific tests of fuels and steam.

Prerequisite: 111 or 113 concurrently.

151, 152 MACHINE DESIGN. (3-3) *Four hours. I, II*

151 Analysis of stresses in machine parts and design of machine elements considering stresses, deflections, and wear.

152 Continuation of 151 with applications to the design of a complete machine.

Prerequisite: 132 and Math.-Mech. 131 for 151; 151 for 152.

G155 MECHANICAL VIBRATIONS. *Three hours. I or II*

An advanced course in the field of machine design with special emphasis on problems of vibrations. Topics include causes of vibrations, methods of study of vibratory motion, determination of vibration stresses, and methods of balancing and damping. Elective (M.E.) seniors by permission.

Prerequisite: 151.

161 POWER PLANTS. (3-3) *Four hours. I*

Principles of the design, installation, operation, and performance of power plant equipment.

Prerequisite: 111.

164 INTERNAL COMBUSTION ENGINES. (3-3) *Four hours. II*

The thermodynamic and mechanical principles of the design, operation, and performance of internal combustion engines.

Prerequisite: 111.

G165 ADVANCED HEAT ENGINES.

Three hours. I or II

Advanced study in theoretical thermodynamics with applications in specific types of heat engines according to the interests of the students. Elective (M.E.) seniors by permission.

Prerequisite: 111.

171 INDUSTRIAL ENGINEERING. (2-3)

Three hours. I

The principles of management and their applications to industrial organizations and operations.

Prerequisite: 52.

172 FACTORY PLANNING. (1-6)

Three hours. II

The systematic analysis of the requirements of a factory for a specific purpose. Work includes the consideration of such items as location, plant design, equipment requirements, general layout, and production planning.

Prerequisite: 171.

175 TIME AND MOTION STUDY. (3-3)

Four hours. I

Principles and methods of making time and motion studies and time formula construction. For students in the Commerce Curriculum only.

Prerequisite: Economics 144.

176 PLANT ORGANIZATION. (2-6)

Four hours. II

Analysis of plant requirements as to location, equipment, layout, and production scheduling. For students in the Commerce Curriculum only.

Prerequisite: Economics 143.

181 AIR CONDITIONING. (3-3)

Four hours. I

The applications of the fundamental principles of thermodynamics to the design and performance of air conditioning equipment and systems for residences, public buildings, and industrial plants.

Prerequisite: 111 or 113.

182 AERODYNAMICS. (3-0)

Three hours. II

The application of the principles of fluid mechanics to the design and performance of aircraft.

Prerequisite: 142.

G185 HYDRAULIC MACHINES.

Three hours. I or II

An advanced study in fluid mechanics applied to hydraulic machines. Elective (M.E.) seniors by permission.

Prerequisite: 142.

192 SEMINAR. (2-0)

Two hours. II

Discussions of the Mechanical Engineering profession, the ethics, responsibilities, and status of members of the profession, and timely activities of present-day practice. Current issues of pertinent publications are used as collateral reading and as guides in the study and discussion of contemporary progress in the field.

Prerequisite: senior standing.

195 SPECIAL PROBLEMS.

Three hours. I or II

A study and investigation on a topic or problem of special interest to the student. Formal submission of results in thesis form required. Problems must be approved by the Chairman of the Department before election of the course. Elective (M.E.) seniors by permission.

G201 ADVANCED MACHINE DESIGN.

Three hours. I or II

Advanced mechanics of materials and applications to mechanical design according to the interests of the student.

Prerequisite: 152.

G203 BALANCING OF MACHINERY.

Three hours. I or II

A theoretical study of balancing problems and discussion of balancing machines.

Prerequisite: 152.

G205 NOMOGRAPHY.

Three hours. I or II

Graphical and mechanical computing methods, alinement charts, and nomographs.

Prerequisite: Calculus.

G221 THESIS RESEARCH.

Credit as arranged. I, II

For graduate students in Mechanical Engineering. Results of research must be submitted in triplicate in bound form.

* MATHEMATICS AND MECHANICS

Professors Bullard and Fraleigh; Associate Professors Kimball and Larrivee; Assistant Professors Millington, Nicholson and Simond; Messrs. Baranoff, Detlef, Duncan, Fishback, Vollmer and Wilson

SPECIAL REQUIREMENTS FOR CONCENTRATION (LIBERAL ARTS CURRICULUM): 21-22 and two advanced courses in mathematics. The related courses are chosen in consultation with the department.

* Not all courses are offered every year. Students who plan to elect any course beyond 21-22 should consult the department in advance as to when such courses will be offered. Students who wish to take either 1, 2 or 11, 12 may be required to demonstrate their proficiency by a qualifying test.

B SOLID GEOMETRY. *No credit.* I

Required of those enrolling in engineering who do not present solid geometry for entrance. Elective to others.

1, 2 FRESHMAN MATHEMATICS. *Three hours.* I, II

For students who do not intend to concentrate in science or mathematics. (See also 11, 12.)

1 Elementary College Algebra

2 Plane Trigonometry

Prerequisite: 1 for 2.

3 PLANE ANALYTICAL GEOMETRY. *Three hours.* I

Prerequisite: 1, 2.

4 MATHEMATICS OF FINANCE. *Three hours.* II

The mathematical theory of finance applied to interest and investments, annuities, and life insurance.

Prerequisite: 1.

7 ANALYTICAL GEOMETRY OF THREE DIMENSIONS. *Three hours.* II

A first course in three dimensional geometry, intended to acquaint the student with the analytics of lines, planes, and quadric surfaces.

Prerequisite: 3.

11, 12 FRESHMAN MATHEMATICS. *Five hours.* I, II

For students who intend to concentrate in science or mathematics.

11 College algebra, plane trigonometry.

12 Spherical trigonometry, plane and solid analytical geometry.

Prerequisite: 11 for 12.

14-15 MODERN GEOMETRY. *Three hours.* I, II

Continuation of the study of Euclidean geometry, introducing many recent theorems.

Prerequisite: 3 or 12.

21-22 CALCULUS. *Three hours.* I, II

The fundamentals of differential and integral calculus and applications to other sciences, with emphasis on the technique of differentiation and integration and the use of calculus in problems of mathematics and physics.

Prerequisite: 12 or 7.

24 THEORETICAL MECHANICS (STATICS). *Three hours.* II

The fundamental concepts, the resultant of a force system by graphical and analytical methods, conditions of equilibrium with application to cranes, trusses, and flexible cables, center of gravity, moment of inertia.

Prerequisite: 21-22 or concurrent enrollment in 22.

25 THEORETICAL MECHANICS (KINETICS). *Three hours. I, II*

The equations of motion of a body under the action of a force system, the principles of work and energy, impulse and momentum.

Prerequisite: 22, 24.

32 GENERAL ASTRONOMY. *Three hours. II*

An elementary course intended to acquaint the student with the basic facts of astronomy. The course includes a study of the history of astronomy, the solar system and stellar astronomy, time and calendar, and a brief survey of astrophysics.

Prerequisite: 12 or 3.

102 HIGHER ALGEBRA. *Three hours. II*

Linear dependence, matrices, properties of polynomials, etc.

Prerequisite: 21.

G105-106 PROJECTIVE GEOMETRY. *Three hours. I, II*

Study of the projective transformations and the associated geometries by both synthetic and analytic methods.

Prerequisite: 21-22.

G107-108 ADVANCED CALCULUS. *Three hours. I, II*

A critical study of the calculus beginning with limits, continuity, differentiation, and Riemann integrals, together with a treatment of those topics not included in the earlier course as a foundation for more advanced courses in analysis and applied mathematics.

Prerequisite: 21-22.

G111, 112 DIFFERENTIAL EQUATIONS. *Three hours. I, II*

111 Solution of ordinary differential equations, introducing operational methods.

112 Solution of partial differential equations; series solutions; topics of analysis especially useful in mathematical physics and engineering.

Prerequisite: 21-22; 111 for 112.

G113-114 FUNCTIONS OF A COMPLEX VARIABLE. *Three hours. I, II*

An elementary study of one complex variable, differentiation and integration, singularities, Riemann surfaces, analytic continuation, etc.

Prerequisite: 107-108.

G116 INFINITE SERIES. *Three hours. I*

Convergent series of constant and of variable terms, uniform convergence, continuity of the sum function, differentiation and integration, and theory of summability.

Prerequisite: credit or concurrent enrollment in 107-108.

G118 MATHEMATICAL STATISTICS. *Three hours. II*

A study of frequency distributions including the calculation of moments, standard deviations and related quantities, the theory of least

squares and its application to scientific problems, the chi-square test and Student's t-test with a discussion of the validity of statistical results.

Prerequisite: 21-22.

G120 VECTOR ANALYSIS.

Three hours. I, II

An introduction to vector methods including the elements of vector algebra and vector calculus with applications to vector physics and mechanics.

Prerequisite: 108 or 112.

G131 MECHANICS OF MATERIALS.

Three hours. I, II

The behavior of elastic bodies, with particular attention to the beam, shaft and column, including simple stress and strain, combined stresses, the elastic curve and strain energy.

Prerequisite: 22, 24.

G201-202 THEORY OF FUNCTIONS.

Three hours. I, II

The functions of real variables, including such topics as point sets and measure, transfinite numbers, Riemann and Lebesgue integrals, sequences of functions. Considerable outside reading is assigned.

Prerequisite: 107-108.

G203-204 RESEARCH.

Credit as arranged

Original investigation intended to culminate in a Master's thesis. Required of graduate students in mathematics seeking the Master's degree.

The College of Agriculture

The College of Agriculture performs four public functions: it teaches resident students; it investigates problems; it disseminates information; it renders related services. These four lines of work are carried out respectively by the resident teaching division; the research division, or Vermont Agricultural Experiment Station; the extension division, or Vermont Agricultural Extension Service; and the related services division.

The resident teaching division offers professional curricula in Agriculture and Home Economics. It aims to provide for young men and women educative experiences which will enable them to become successful farmers or homemakers, teachers in secondary schools or agricultural extension workers, or specialists engaged in teaching, research, or industrial or professional work in their chosen fields.

The Agricultural Experiment Station has as its essential functions to conduct research in Agriculture and Home Economics, to administer certain regulatory statutes, and to publish the results of such work.

The Vermont Agricultural Extension Service is a cooperative undertaking of the State of Vermont, the College of Agriculture, the United States Department of Agriculture, and the several counties of the State. It has a State staff, with headquarters at the University, and a staff of county extension agents in each county. Its purpose is "to aid in diffusing among the people . . . useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same." It works primarily with the rural people of the State, including both adults and children.

The related services division renders various services in the fields of agriculture and home economics, such as inspection of feed, seeds, and fertilizer; analysis of soils, milk, and other agricultural products on request; diagnosis of diseases of plants, poultry, and other livestock; and conduct of short courses and educational conferences.

AGRICULTURE

THE CURRICULA IN AGRICULTURE

In Agriculture there are the General Agricultural and Agricultural Engineering Curricula and the Pre-Forestry and Pre-Veterinary programs. Each freshman on entering the college must choose one of these. Each includes required and elective courses. Basic courses are required in the sciences, literature, and subjects essential in providing a broad educational

foundation for the more technical courses. Courses required in the major field are largely in applied science and technology. The electives may be chosen from courses offered throughout the University.

THE GENERAL AGRICULTURAL CURRICULUM

The General Agricultural Curriculum, leading to the degree of Bachelor of Science in Agriculture, requires 130 semester hours of required and elective courses, exclusive of those in Military Science and Physical Education. The courses in Agriculture are designed to provide training of a general nature as preparation for farming, secondary school teaching, or county extension work, as well as concentrated study, as preparation for industrial and professional positions or for advanced training, in one of the following fields: agricultural economics, agricultural education and extension, agronomy, botany, dairy manufacturing, dairy production, horticulture, or poultry husbandry.

In each of these fields, to provide a well-balanced and integrated educational program and to insure reasonable concentration, a sequence of courses is prescribed which includes a minimum of required courses and makes allowance for the election of additional subjects. The faculty advisor for each major sequence will counsel the student in the selection of these elective courses. A total of eighteen credit hours is normally considered a maximum enrollment.

As part of the preliminary registration program an English placement test is given, on the basis of which a few students are excused from the freshman course in English. Such students substitute another course, normally in English.

All students in the General Agricultural Curriculum take a uniform program during the first year, and, in addition, a second year of English, one year of Principles of Economics, and one semester of Public Speaking.

Before the end of the freshman year each student indicates to the Dean the major sequence which he expects to follow in completing the requirements for his degree.

OUTLINE OF GENERAL AGRICULTURAL CURRICULUM

FRESHMAN YEAR

	1st	2nd
	SEMESTER	
English Composition	3	3
Mathematics I .....	...	3
Introductory Botany	4	...
General Chemistry	4	4
Agricultural Survey	1	1
†Electives	3-6	4-7
Military Science (Men)	2	2
Physical Education	(1)	(1)
Hygiene (Women)	(1)	(1)

† The courses listed below for the designated sequences will be taken in the freshman year in addition to those prescribed above.

Agricultural Education and Extension

General Horticulture

Public Speaking

Dairy Manufacturing and Dairy Production

General Dairying

Public Speaking

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
Agricultural Cooperation	2	
English	3	3
General Dairying	3	
General Field Crops	3	
Livestock		2
General Poultry Husbandry	3	
General Soils		3
Principles of Economics	3	3
Electives		4-7
Military Science (Men)	2	2
Physical Education	(1)	(1)

JUNIOR YEAR	1st SEMESTER	2nd SEMESTER
General Horticulture	3	
Marketing Farm Products		3
Public Speaking		3
Rural Sociology	3	
Woodland Management	3	3
Electives	6-9	6-9

SENIOR YEAR	1st SEMESTER	2nd SEMESTER
Farm Credit		3
Farm Management	3	3
Public Problems of Agriculture		3
Electives	12-15	6-9

AGRICULTURAL EDUCATION AND EXTENSION

SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
Periodical Writing	3	
Expository Writing		3
General Bacteriology		3
General Dairying	3	
General Farm Engineering	3	3
General Soils		3
Principles of Economics	3	3
Intro. Zoology		4
Electives	0-2	0-3
Military Science (Men)	2	2
Physical Education	(1)	(1)

JUNIOR YEAR	1st SEMESTER	2nd SEMESTER
*Extension Methods		2
Farm Management	3	3
General Field Crops	3	
General Psychology	3	3
Marketing Farm Products		3
Rural Education	3	
Woodland Management	3	3
Electives	0-3	1-4

SENIOR YEAR	1st SEMESTER	2nd SEMESTER
†Adult Education		3
*Extension Methods		2
†Farm Shop	3	
Feeds and Feedings	3	
General Poultry	3	
Milk Production	3	
Phil. of Amer. Agriculture	3	
†Vocational Methods and Practice Teaching		10
Electives	0-3	0-16*

* For Agricultural Extension only.

† For Agricultural Education only.

AGRONOMY, BOTANY AND HORTICULTURE

SOPHOMORE YEAR
(For All Three Sequences)

	1st SEMESTER	2nd SEMESTER
Soph. English (Botany, Hort.)	3	3
Principles of Economics	3	3
Introductory Physics	3	3
Outline of Organic Chem.	5	...
General Bacteriology	...	3
General Horticulture (Hort.)	3	...
or General Soils (Agron.)	...	3
or Morphology (Botany)	3	3
Plant Propagation (Hort.)	...	2
Intro. to Zoology (Agron.)	4	...
Electives	0-3	3-6
Physical Education	(1)	(1)
Military Science (Men)	2	2

AGRONOMY, JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Biological Statistics	...	3
Fertilizers or Gen. Entom.	3-4	...
Forage & Pasture Crops	...	3
Plant Pathology	4	...
Plant Physiology	5	...
Public Speaking	...	3
Soils and Soils Management	4	...
Electives	0-2	6-9

AGRONOMY, SENIOR YEAR

	1st SEMESTER	2nd SEMESTER
Field Crop Imp. and Mgmt.	3	...
Agronomy Seminar	...	1
Farm Management	3	3
Gen. Entom. or Fertilizers	4-3	...
Genetics	3	...
Periodical Writing	3	...
Expository Writing	...	3
Soil Conservation	...	3
Electives	0-3	5-8

*BOTANY, JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Genetics	3	...
Plant Physiology	5	...
Public Speaking	...	3
Electives	7-10	12-15

*BOTANY, SENIOR YEAR

	1st SEMESTER	2nd SEMESTER
Fungi	4	...
Taxonomy	...	3
Electives	11-14	12-15

†HORTICULTURE, JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Horticulture Seminar	...	1
Horticultural Science	...	3
Plant Pathology	4	...
Plant Physiology	5	...
Public Speaking	...	3
Electives	6-9	8-11

†HORTICULTURE, SENIOR YEAR

	1st SEMESTER	2nd SEMESTER
Advanced Hort. Sem.	...	1
General Entomology	4	...
Genetics	3	...
Electives	8-11	14-17

* Education in Botany depends on the discipline of other sciences. The student is expected to broaden his scientific experience with courses in other departments.

† Three fields of specialization are possible during the junior and senior years: Fruit Growing, Vegetable Growing, and Ornamental Horticulture.

DAIRY MANUFACTURING

SOPHOMORE YEAR

1st 2nd
SEMESTER

Dairy Chemistry and Testing	4
English	3 3
General Bacteriology	3
Outline of Organic Chem.	5
Principles of Economics	3 3
Intro. to Zoology	4
Electives	0-3 2-5
Military Science (Men)	2 2
Physical Education	(1) (1)

JUNIOR YEAR

1st 2nd
SEMESTER

Dairy Bacteriology	3
Dairy Plant Engineering or Condensed Milk, etc.	2-3
Ice Cream or Butter, Cheese and Casein	3
Introductory Physics	3 3
Judging Dairy Products	2
Market Milk	2 2
Principles of Accounting	3 3
Electives	1-4 3-6

SENIOR YEAR

1st 2nd
SEMESTER

Agricultural Cooperation	2
Butter, Cheese, and Casein or Ice Cream	3
Condensed Milk, etc. or Dairy Plant Engineering	3-2
Feeds and Feeding	3
Marketing Farm Products	3
Milk Production	3
Seminar	1
Electives	4-7 9-12

DAIRY PRODUCTION

SOPHOMORE YEAR

1st 2nd
SEMESTER

Dairy Chemistry and Testing	4
English	3 3
General Bacteriology	3
Livestock	2
Outline of Organic Chem.	5
Principles of Economics	3 3
Intro. to Zoology	4
Electives	0-3 0-3
Military Science (Men)	2 2
Physical Education	(1) (1)

JUNIOR YEAR

1st 2nd
SEMESTER

Anatomy and Physiology	2
Forage and Pasture Crops	3
Animal Nutrition	2
Dairy Bacteriology	3
Diseases of Farm Animals	2
Feeds and Feeding	3
General Field Crops	3
General Soils	3
Introductory Physics	3 3
Electives	1-4 2-5

SENIOR YEAR

1st 2nd
SEMESTER

Agricultural Cooperation	2
Farm Management	3 3
Animal Breeding	3
General Farm Engineering	3 3
Livestock Production	3
Marketing Farm Products	3
Milk Production	3
Seminar	1
Electives	1-4 2-5

POULTRY HUSBANDRY

SOPHOMORE YEAR

	1st SEMESTER	2nd SEMESTER
English	3	3
General Bacteriology .....	...	3
General Poultry Husbandry	3	...
Incubation and Brooding .....	...	4
Introductory Physics	3	3
Outline of Organic Chem.	5	...
Principles of Economics	3	3
Military Science (Men)	2	2
Physical Education	(1)	(1)

JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Pasture and Forage Crops .....	...	3
Poultry Feeding	4	...
Poultry Housing .....	...	2
Poultry Sanitation and Disease Control .....	...	4
Public Speaking .....	...	3
Electives	11-14	3-6

SENIOR YEAR

	1st SEMESTER	2nd SEMESTER
Anatomy and Physiology	2	...
Farm Management	3	3
Processing and Packaging Poultry Products	3	...
Electives	7-10	12-15

THE AGRICULTURAL ENGINEERING CURRICULUM

The Agricultural Engineering Curriculum, leading to the degree of Bachelor of Science in Agricultural Engineering, requires 130 semester credit hours of work, exclusive of courses required in Physical Education and Military Science, and includes elective courses. It provides students with an educative experience in engineering, particularly as applied to the rural field. The curriculum, the instructional staff, and the course content are jointly approved by the Dean of the College of Technology and the Dean of the College of Agriculture.

OUTLINE OF AGRICULTURAL ENGINEERING CURRICULUM

THE FRESHMAN YEAR

	1st SEMESTER	2nd SEMESTER
*English Composition	3	3
Freshman Math.	5	5
Engineering Drawing	3	3
General Chemistry	4	4
Approved Elective	3	3
Military Science (Men)	2	2
Physical Education	(1)	(1)
Hygiene (Women)	(1)	(1)

THE SOPHOMORE YEAR

	1st SEMESTER	2nd SEMESTER
Calculus	3	3
General Physics	5	5
Statics .....	...	3
Expository Writing .....	...	3
Principles of Economics	3	3
Surveying	4	...
Elements of Mech. Engineering ..	3	...
Military Science (Men)	2	2
Physical Education	(1)	(1)

* Students exempted from this course on the basis of the placement test may substitute another course, normally in English.

THE JUNIOR YEAR	1st SEMESTER	2nd SEMESTER	THE SENIOR YEAR	1st SEMESTER	2nd SEMESTER
General Dairying	3	...	Field Machinery or		
Fluid Mechanics .....	...	4	Farm Structures .....	...	3
Kinetics	3	...	Farm Utilities or Power		
Mechanics of Materials .....	...	3	Machinery	3	...
Thermodynamics	4	...	Farm Shop or General Elec.		
Farm Structures or			Engineering or Soil and		
Field Machinery .....	...	3	Water Engineering	3-4	3-4
Power Machinery or			Farm Management	3	3
Farm Utilities	3	...	Public Speaking .....	...	3
Farm Shop or Soil & Water En-			Poultry Husbandry	3	...
gineering or General Elec. En-			Seminar	1	1
gineering	3-4	3-4	Approved Elective	2-5	2-5
General Soils .....	...	3			
Approved Elective	0-2	2-0			

THE PRE-FORESTRY PROGRAM

The Pre-Forestry Program provides the first two years of a four-year professional forestry curriculum leading to the degree of Bachelor of Science in Forestry. The last two years of course work must be taken at some institution which confers this degree. The program may be adjusted to meet the requirements of different Forestry schools.

English composition for one year is required for transfer to a professional school. Exemption from English Composition on the basis of the English Placement test cannot be granted for this program.

OUTLINE OF PRE-FORESTRY PROGRAM

FRESHMAN YEAR	1st SEMESTER	2nd SEMESTER	THE SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
Algebra, Plain Trigonometry	3	3	Dendrology .....	...	2
Dendrology	1	3	Expository Writing .....	...	3
Elements of Forestry .....	...	3	General Chemistry	4	4
English Composition	3	3	Introductory Physics	3	3
Introductory Botany	4	...	Introduction to Zoology	4	...
Introductory Geology	4	4	Principles of Economics	3	3
Mechanical Drawing	3	...	Surveying	4	...
Electives	0-2		Elective .....	...	0-3
Military Science (Men)	2	2	Military Science (Men)	2	2
Physical Education	(1)	(1)	Physical Education	(1)	(1)
Hygiene (Women)	(1)	(1)			

THE PRE-VETERINARY PROGRAM

The Pre-Veterinary Program provides preparation for entrance to veterinary colleges. The program may be adjusted to meet the requirements of different veterinary colleges.

OUTLINE OF PRE-VETERINARY PROGRAM

FRESHMAN YEAR	1st SEMESTER	2nd SEMESTER	SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
Agriculture Survey	1	1	General Entomology	4	...
*English Composition	3	3	Introductory Physics	3	3
General Chemistry	4	4	Organic Chemistry	4	4
Introduction to Zoology	4	...	Public Speaking .....	...	3
Introductory Botany	4	...	Survey of American History		
Mathematics 1 .....	...	3	or American Government	3	3
Vertebrate Zoology .....	...	4	Elective	1-4	2-5
Elective	0-2	0-3	Military Science (Men)	2	2
Military Science (Men)	2	2	Physical Education	(1)	(1)
Physical Education	(1)	(1)			
Hygiene (Women)	(1)	(1)			

* Students exempted from this course on the basis of the placement test may substitute another course, normally in English.

COURSES OF INSTRUCTION

AGRICULTURE

1-2 AGRICULTURE SURVEY. (1-0)

One hour. I, II

Designed to develop a broad concept of the field of agriculture. The organization and functioning of the College of Agriculture; history and status of Vermont agriculture; nature, content, and interrelation of different pursuits in the agricultural field and agricultural industries.

The Dean and the Staff

AGRICULTURAL BIOCHEMISTRY

Associate Professor Little; Assistant Professor Johnstone; Mr. Foote

71 ELEMENTARY BIOCHEMISTRY. (2-2)

Three hours. I

Introduction to the chemistry of living matter. Chemistry and metabolism of essential constituents of food: carbohydrates, proteins, fats, vitamins.

Prerequisite: Chemistry 31-32 or 35.

Mr. Little

Agricultural Biochemistry, Agricultural Economics 113

72 CHEMISTRY OF FOODS. (2-2)

Three hours. II

General discussion of foodstuffs with quantitative chemical analysis of milk, edible fats and oils, carbohydrate foods, proteins, and tests for preservatives and adulterants.

Prerequisite: Chemistry 31-32 or 35.

Mr. Little

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

AGRICULTURAL ECONOMICS

Professor T. M. Adams; Associate Professor Carter; Assistant Professor Story

21 AGRICULTURE COOPERATION. (2-0)

Two hours. I

The nature and development of cooperative business enterprises, their organization, financing, and business management.

Prerequisite: sophomore standing.

Mr. Adams

G101-102 FARM MANAGEMENT. (2-2)

Three hours. I, II

The organization and operation of a successful farm business.

Prerequisite: Economics 11-12.

Mr. Story

G103 RURAL SOCIOLOGY. (3-0)

Three hours. I

A survey of rural organization in terms of social grouping and of the physical, psychological, and social controls. Considerable time is given to problems of the rural community.

Prerequisite: Economics 11-12.

Mr. Carter

G104 MARKETING FARM PRODUCTS. (2-2)

Three hours. II

The distribution of Vermont farm products and the problems involved.

Prerequisite: Economics 11-12.

Mr. Adams

G106 PUBLIC PROBLEMS OF AGRICULTURE. (3-0)

Three hours. II

Price fluctuations as they affect farming, agricultural legislation, land use, costs of local government, and other problems of contemporary interest to farmers.

Prerequisite: Economics 11-12.

Mr. Carter

108 FARM CREDIT. (2-2)

Three hours. II

The types and sources of credit used by farmers, and the lending practices and problems of credit agencies. Appraisal of farm real estate and personal property.

Prerequisite: Economics 11-12.

Mr. Story

G151, 152 RESEARCH METHODS. (3-0)

Three hours. I, II

Efficient procedures for students engaged in scientific research.

Prerequisites: Economics 11-12; senior standing and permission of the department.

The Staff

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

AGRICULTURAL EDUCATION

Assistant Professor Davison; Mr. Woodbull

101 RURAL EDUCATION. (2-2)

Three hours. I

The organization of rural education with consideration of the duties and responsibilities of the rural teacher.

Prerequisite: junior standing.

Mr. Woodbull

102 EXTENSION METHODS. (1-2)

Two hours. II

Methods and technique of extension teaching. (Offered in alternate years, 1951-52.)

Prerequisite: junior standing.

Mr. Davison

150 VOCATIONAL METHODS AND PRACTICE TEACHING.

Ten hours. II

Methods of teaching vocational agriculture, with consideration of program planning and organization. Part of the semester will be devoted to practice teaching in an approved high school department under the supervision of a critic teacher.

Prerequisite: 101; senior standing.

Mr. Woodbull

152 ADULT EDUCATION. (2-2)

Three hours. II

The principles underlying successful programs of adult education. Determination of needs, program planning, and organization of units on selected programs.

Prerequisite: 101; senior standing.

Mr. Woodbull

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

AGRICULTURAL ENGINEERING

Associate Professor Schneider; Assistant Professor Jones

1, 2 GENERAL FARM ENGINEERING. (3-0) *Three hours. 1, 11*

An introductory course including units on gas engines, farm structures, concrete, farm water supply, electricity, refrigeration, and farm machines.

Mr. Schneider

22 POULTRY HOUSING. (1-2) *Two hours. 11*

The principles and practices of poultry house construction and utilization. (Offered in alternate years, 1951-52.)

Prerequisite: sophomore standing.

Mr. Schneider

41 FARM SHOP. (0-6) *Three hours. 1*

Instruction in woodworking, hot and cold metal working, sheet metal, welding, and tool fitting, including demonstrations and methods of teaching these operations. Problems in shop care, layout, safety, and selection of equipment.

Prerequisite: junior standing.

Mr. Schneider

101 FARM UTILITIES. (2-2) *Three hours. 1*

The theory and application of water systems and plumbing; sewage disposal and refrigeration. (Offered in alternate years, 1952-53.)

Prerequisite: Physics 11-12.

Mr. Jones

102 FIELD MACHINERY. (2-2) *Three hours. 11*

The theory, design, operation and maintenance of field machinery. (Offered in alternate years, 1951-52.)

Prerequisite: Physics 11-12, Math. 25.

Mr. Jones

103 FARM POWER MACHINERY. (2-2) *Three hours. 1*

The theory, design, operation, and maintenance of tractors and their engines. (Offered in alternate years, 1951-52.)

Prerequisite: M. E. 111.

Mr. Jones

104 FARM STRUCTURES. (2-2) *Three hours. II*

The design of farm structures; materials, structural requirements, functional requirements; insulating, heating, and ventilating. (Offered in alternate years, 1952-53.)

Prerequisite: Math. 131.

Mr. Jones

106 SOIL AND WATER ENGINEERING. (2-2) *Three hours. II*

The engineering problems involved in the application of hydrologic and agronomic data to the design, location, and construction of farm ponds, drainage and irrigation systems, and erosion control facilities. (Offered in alternate years, 1951-52.)

Prerequisite: Agronomy 2, Civ. Engrg. 161, Physics 11-12. *Mr. Jones*

153-154 SEMINAR. (1-0) *One hour. I, II*

Review and discussion of current agricultural engineering research and student reports and studies of agricultural engineering problems.

Prerequisite: Civ. Engrg. 161, Mech. Engrg. 111, Math. G131; senior standing. *The Staff*

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

AGRONOMY

*Associate Professor Wood; Assistant Professor *Kelly*

1 GENERAL FIELD CROPS. (2-2) *Three hours. I*

Introduction to field crops common in Vermont and throughout the United States, including science, practice, and uses. *Mr. Wood*

2 GENERAL SOILS. (2-2) *Three hours. II*

Elementary principles of soil fertility and management. *Mr. Kelly*

21 FIELD CROP IMPROVEMENT AND MANAGEMENT. (2-2) *Three hours. I*

Field crops other than forage and pasture; the theory and practice of producing, improving, and managing field crops.

Prerequisite: sophomore standing.

Mr. Wood

* On military leave.

Agronomy, Animal and Dairy Husbandry 117

- 22 FORAGE AND PASTURE CROPS. (2-2) *Three hours. II*
 Hay and pasture grasses, legumes, seeding mixtures, fertilization, and management.

Prerequisite: sophomore standing. Mr. Wood

- 23 SOILS AND SOILS MANAGEMENT. (3-2) *Four hours. I*
 The geology, physics, chemistry, and biology of soils.

Prerequisite: sophomore standing. Mr. Kelly

- 101 FERTILIZERS. (2-2) *Three hours. I*
 Principles of plant nutrition, nutrient deficiency symptoms, grade formulation, rates, and ratios for specific crops. (Offered 1952-53.)

Prerequisite: 2 or 23-24; junior standing. Mr. Kelly

- G152 SOIL CONSERVATION. (2-2) *Three hours. II*
 Types of erosion and control measures; effect on general welfare; conservation farming and land use.

Prerequisite: senior or graduate standing. Mr. Wood

- G162 AGRONOMY SEMINAR. (0-2) *One hour. II*
Prerequisite: 101; Agronomy senior or graduate standing, or permission of the department. *The Staff*

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

ANIMAL AND DAIRY HUSBANDRY

*Professors Riddell and Newlander; Associate Professor Bradfield;
 Messrs. Fitzsimmons and Reed*

- 1 GENERAL DAIRYING. (2-3) *Three hours. I*
 Introductory course in dairy cattle management and judging; quality milk production; Babcock test.

Messrs. Bradfield, Fitzsimmons and Reed

- 2 LIVESTOCK OTHER THAN DAIRY. (1-3) *Two hours. II*
 Types, breeds, and market classes. Mr. Fitzsimmons

- 22 JUDGING DAIRY PRODUCTS. (0-4) *Two hours. II*
 Quality, market standards, and scoring.

Prerequisite: sophomore standing. Mr. Bradfield

- G101, 102 MARKET MILK. (1-3) *Two hours. I, II*
 Quality production, processing, and distribution.
Prerequisite: 104, 109*; G101 for G102; junior standing.
Messrs. Bradfield and Reed
- 103 LIVESTOCK PRODUCTION. (2-3) *Three hours. I*
 Production and management of horses, sheep, swine, and beef cattle.
Prerequisite: 2. *Mr. Fitzsimmons*
- 104 CHEMISTRY AND TESTING OF DAIRY PRODUCTS. (2-4) *Four hours. II*
 Chemical and physical properties of milk and milk products.
 Standard methods of analysis.
Prerequisite: Chem. 35.* *Mr. Newlander*
- 105 FEEDS AND FEEDING. (2-3) *Three hours. I*
 Feeds, rations, and feeding practice.
Prerequisite: junior standing. *Mr. Newlander*
- G106 ANIMAL NUTRITION. (2-0) *Two hours. II*
 Nutrients, their function and utilization, and requirements for growth, reproduction, lactation, etc.
Prerequisite: 105; Chem. 31-32 or 35. *Mr. Newlander*
- G108 ANIMAL BREEDING. (3-0) *Three hours. II*
 Application of genetic principles to the breeding of farm animals.
Prerequisite: senior standing or permission of the department.
Mr. Riddell
- 109 DAIRY BACTERIOLOGY. (1-4) *Three hours. I*
 Relation of micro-organisms to milk and milk products, methods of examination and control.
Prerequisite: Bot. 107. *Mr. Newlander*
- 110 ADVANCED STOCK JUDGING. (1-6) *Three hours. II*
 Instruction and practice in judging, with emphasis on dairy cattle.
Prerequisite: 1; junior standing. *Mr. Fitzsimmons*
- G111 ICE CREAM. (2-3) *Three hours. I*
 Theory and practice. (Offered in alternate years, 1951-52.)
Prerequisite: 104, 109*; junior standing. *Messrs. Bradfield and Reed*
- G113 BUTTER, CHEESE, AND CASEIN. (1-6) *Three hours. I*
 Theory and practice. (Offered in alternate years, 1952-53.)
Prerequisite: 104, 109* junior standing. *Messrs. Bradfield and Reed*
- * *Prerequisite* may be taken concurrently.

Animal and Dairy Husbandry, Animal Pathology 119

G114 CONDENSED, EVAPORATED, AND DRIED MILK. (2-3)

Three hours. II

Theory and practice. (Offered in alternate years, 1951-52.)

Prerequisite: 104, 109; junior standing. *Messrs. Bradfield and Reed*

116 DAIRY PLANT ENGINEERING. (1-2)

Two hours. II

Theory and practical problems in selection and use of dairy processing equipment. (Offered in alternate years, 1952-53.)

Prerequisite: Physics 1; junior standing. *Mr. Bradfield*

G151 MILK PRODUCTION. (3-0)

Three hours. I

Feeding and management of the dairy herd with emphasis on profitable milk production.

Prerequisite: 105*; senior standing or permission of the department.

Mr. Riddell

G160 SEMINAR. (0-1)

One hour. II

Senior or graduate standing, or permission of the department.

The Staff

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

ANIMAL PATHOLOGY

Assistant Professors Bolton and Durrell

105 ANATOMY AND PHYSIOLOGY. (2-0)

Two hours. I

The various anatomical structures and their physiological functions.

Prerequisite: Bot. 107; sophomore standing.

Mr. Durrell

106 DISEASES OF FARM ANIMALS. (2-0)

Two hours. II

The causes, symptoms, and prevention of diseases of farm animals.

Prerequisite: 105; sophomore standing.

Mr. Durrell

116 POULTRY SANITATION AND DISEASE CONTROL. (3-2)

Four hours. II

The causes, symptoms, and prevention of parasitic, infectious, and nutritional diseases of poultry. A discussion of the hygienic and sanitary measures used in incubation, breeding, and rearing poultry will be given as indicated. Demonstrations and necropsies.

Prerequisite: Bot. 107; sophomore standing.

Mr. Bolton

* Prerequisite may be taken concurrently.

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

BOTANY

Professors Marvin and Gersbory; Associate Professors Dole, Sproston, and Taylor; Assistant Professors Johnstone and Raynor

1 INTRODUCTORY BOTANY. (2-4)

Four hours. I

For science students. Fundamental principles of biology illustrated by morphology, physiology, and reproduction of vascular plants. A study of forms and functions, leading to an understanding of the plant as a dynamic unit. *Messrs. Taylor, Marvin, and Miss Raynor*

3-4 GENERAL BOTANY. (2-4)

Four hours. I, II

An introductory course, primarily for general arts students. Structures and phenomena of growth and reproduction; origins and relationships of major plant groups; biological principles in relation to human culture and civilization. *Mr. Dole*

10. FIELD BOTANY.

Three hours. s.s.

A study of the morphology of the higher plants with emphasis upon the evolution of floral types; collections and identifications will be made from the local flora. The use of keys and manuals is an integral part of this course. The University herbarium of 260,000 plant specimens is available for reference. (Offered in the Summer Session only, 1951.)

Mr. Dole

101 GENETICS. (2-2)

Three hours. I

Basic principles and theory of modern plant and animal breeding; elementary concepts of variation, inheritance, biometry, and cytogenetics. (No student may receive credit both for this course and for Zoology 115.)

Prerequisites: 1 or 3-4; Zool. 1; junior standing.

Mr. Gersbory

103, 104 MORPHOLOGY. (2-3)

Three hours. I, II

Comparative study of the structures, reproductive activities, and phylogenetic relationships of the major groups of plants. (Offered 1952-53.)

103 Algae, fungi, liverworts and mosses.

104 Ferns and seed plants.

Prerequisite: 1 or 3-4.

The Staff

- 105 ECONOMIC BOTANY. (2-4) *Four hours. 1*
The relation of plants to human history and contemporary life. Botanical and economic aspects of plants used as sources of foods, drugs, and other products of importance in everyday living. (Offered in alternate years, 1951-52.)
Prerequisite: 1 or 3-4. *Mr. Taylor*
- 107 GENERAL BACTERIOLOGY. (1-4) *Three hours. 11*
Principles and techniques employed in the study of micro-organisms their isolation and cultural aspects with reference to human disease and public health work, their importance to agriculture, industry and foods.
Prerequisite: 1 or 3-4 or Zool. 1; Chem. 1-2 or 4. *Mr. Johnstone*
- 109 INTRODUCTORY PLANT PATHOLOGY. (2-4) *Four hours. 1*
Diagnosis, life history, and control of plant diseases caused by fungi, viruses, bacteria, and nematodes.
Prerequisite: 1 or 3-4. *Mr. Sproston*
- 111 PLANT PHYSIOLOGY. (2-6) *Five hours. 1*
Mechanisms of absorption, translocation, synthesis, and utilization of materials; role of internal and external factors in growth.
Prerequisite: 1 or 3-4; Chem. 1-2 or 4. *Mr. Marvin*
- 112 MICROTECHNIQUE. (1-6) *Four hours. 11*
Preparation and study of microscopic biological material with emphasis on somatic and reproductive cells and their modifications. Slide making techniques; optics in relation to the microscope.
Prerequisite: 1 or 3-4; Zool. 1. *Miss Raynor*
- 114 ECOLOGY. (2-1) *Three hours. 11*
The concept of vegetation as an organism; the plant formation; endemism; invasion and succession in climax formations. Meteorological, edaphic, and biotic factors of the habitat. Life forms. Ecological classification and nomenclature. (Offered in alternate years, 1951-52.)
Prerequisite: 111. *Mr. Dole*
- 116 TAXONOMY. (1-4) *Three hours. 11*
Principles of taxonomy as exemplified in living plants and herbarium material. Historical survey of significant phylogenetic schemes and modern systems of classification; the species concept; variation and discontinuity; speciation. (Offered in alternate years, 1950-51.)
Prerequisite: 1 or 3-4; junior standing. *Mr. Dole*
- G151 PLANT ANATOMY AND HISTOLOGY. (2-4) *Four hours. 1*
Development of the plant body and accompanying integration of cellular tissues. Ontogeny of the conducting, supporting, and pro-

rective tissues; modifications of the cell wall. (Offered in alternate years, 1950-51.)

Prerequisite: 103-104; senior standing.

Mr. Taylor

G152 CYTOLOGY. (2-4)

Four hours. II

The protoplast; somatic and meiotic divisions, gametogenesis, syngamy, and substitute methods of reproduction; interrelation of chromosomal and genetic phenomena. (Offered in alternate years, 1951-52.)

Prerequisite: 101 or Zool. 115; Chem. 31-32 or Chem. 35; senior standing.

Mr. Gersboy

G153 FUNGI. (2-4)

Four hours. I

Classification and reproductive processes of the common molds, yeasts, and actinomycetes. Physiological studies and antibiosis. (Offered in alternate years, 1951-52.)

Prerequisite: 111, or permission of the department.

Mr. Sproston

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

FORESTRY

Professor W. R. Adams; Assistant Professor Hopkins

1 ELEMENTS OF FORESTRY. (3-0)

Three hours. II

Introduction to specialization in forestry and conservation. Open to Pre-Forestry students only.

Mr. Hopkins

3 DENDROLOGY. (0-3)

One hour. I

Field identification and characteristics of the more important forest trees and formation of forest types.

Mr. Adams

100 DENDROLOGY OF ANGIOSPERMS. (2-3)

Three hours. II

Classification and silvical characteristics of the more important broad leaf forest trees of North America. Twig identification.

Prerequisite: 3.

Messrs. Adams and Hopkins

102 DENDROLOGY OF GYMNOSPERMS. (2-0)

Two hours. II

Classification and silvical characteristics of the more important native and exotic coniferous forest trees of North America.

Prerequisite: 3, 100.

Mr. Hopkins

103-104 WOODLAND MANAGEMENT. (2-3) *Three hours. 1, II*
Establishment, protection, and management of farm woodlands and small forest areas.

Prerequisite: Bot. 1 or 3-4; junior standing. Messrs. Adams and Hopkins

G105 MENSURATION. (1-3) *Two hours. I*
Timberland surveying, timber estimating, log scaling, and growth determinations of trees and stands.

Prerequisite: 103-104. *Mr. Hopkins*

G106 UTILIZATION OF WOODLAND PRODUCTS. (1-3) *Two hours. II*
Sawmilling, wood products manufacture, maple products, wood preservation, and private and cooperative marketing practices.

Prerequisite: 103 or permission of the department. *Mr. Hopkins*

G108 BIOLOGICAL STATISTICS. (3-0) *Three hours. II*
The application of statistics to the analysis of biological data. Field plot technique. Interpretation of statistical analysis.

Prerequisite: Math. 1; junior standing. *Mr. Adams*

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

HORTICULTURE

Associate Professor Blasberg; Assistant Professors Hopp and Hume; Mr. Calaban

1 GENERAL HORTICULTURE. (2-2) *Three hours. I*
An introductory course dealing with materials and practices in the field of horticulture. *Mr. Blasberg*

2 SMALL FRUIT CULTURE. (2-2) *Three hours. II*
The fundamental principles underlying plant growth and fruit production and the relation of these principles to practice. *Mr. Blasberg*

3 VEGETABLE CULTURE. (2-2) *Three hours. I*
The characteristics of some more important crops and their responses to various conditions of environment. *Mr. Hopp*

- 5 ESTHETIC HORTICULTURE. (3-0) *Three hours. I*
 An introduction to the possible uses of ornamental plant materials in beautifying the home and its surroundings, designed to develop an appreciation of the part which ornamental plants have in the culture of today. *Mr. Hume*
- 101 TREE FRUITS. (2-2) *Three hours. I*
 A study of environmental factors affecting fruit productions. (Offered in alternate years, 1951-52.)
Prerequisite: 1. Mr. Calaban
- 102 PLANT PROPAGATION. (1-2) *Two hours. II*
 The theory and practice of multiplying plants by various methods. *Mr. Hume*
Prerequisite: Bot. 1 or 3-4.
- 103 ADVANCED TREE FRUITS. (2-2) *Three hours. I*
 A study of cultural practices and the principles involved in modern fruit production. (Offered in alternate years, 1952-53.)
Prerequisite: 1 and 101. Mr. Calaban
- 104 HORTICULTURAL SCIENCE. (2-2) *Three hours. II*
 The principles of growth of horticultural plants and their relation to horticultural practices. *Mr. Blasberg*
Prerequisite: Bot. 111.
- 110 HORTICULTURE SEMINAR. (1-0) *One hour. II*
 Discussion of horticultural topics. Students required to prepare and present papers on selected subjects. *The Staff*
Prerequisite: 1; junior standing.
- 111-112 PLANT MATERIALS. (1-2) *Two hours. I, II*
 A course designed to familiarize the student with the more important herbaceous and woody plants available for garden and landscape purposes. (Offered in alternate years, 1951-52.)
Prerequisite: 1. Mr. Hume
- 113-114 COMMERCIAL FLORICULTURE AND NURSERY
 MANAGEMENT. (1-2) *Two hours. I, II*
 The application of physiological principles to the production of flowers and nursery plants with special emphasis on structures for growing plants, cultural methods, control of flowering, and methods of grading, packing, and marketing. (Offered in alternate years, 1952-53.)
Prerequisite: 1. Mr. Hume

116 ADVANCED VEGETABLE CULTURE. (2-2) *Three hours. II*

A continuation of Hort. 3; important vegetables and their culture; review of recent experimental work and its application to commercial vegetable growing. (Offered in alternate years, 1951-52.)

Prerequisite: 1 and 3.

Mr. Hopp

G150 ADVANCED HORTICULTURE SEMINAR. (1-0) *One hour. II*

Prerequisite: 110; senior standing.

The Staff

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

POULTRY HUSBANDRY

Associate Professor Henderson

1 GENERAL POULTRY HUSBANDRY. (2-2) *Three hours. I*

The principles of poultry husbandry and their application to general farm conditions.

101 POULTRY FEEDING. (3-2) *Four hours. I*

Feeding poultry for egg production, growth, and fattening. Practice in compounding rations. Experimental work and feeding problems.

Prerequisite: Chem. 35; junior standing.

102 INCUBATION AND BROODING. (2-4) *Four hours. II*

General biology as applied to incubation and the fundamental principles underlying incubation practices. The theory and practice of brooding chickens and other poultry. (Offered in alternate years, 1951-52.)

Prerequisite: 1; sophomore standing.

103 PROCESSING AND PACKAGING POULTRY PRODUCTS. (2-2) *Three hours. I*

The principles of marketing as they apply to eggs and poultry meat. Candling, grading, and packing eggs for market. Preparation of poultry for market. A one-week inspection trip to the Boston market is required. Charge to cover expenses of trip to Boston, \$25.00. (Offered in alternate years, 1951-52.)

Prerequisite: junior standing.

SPECIAL STUDY

G191 to 199. An additional course or courses, supplementary to those listed in the department, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: junior standing and permission of the department.

The Staff

HOME ECONOMICS

THE CURRICULUM IN HOME ECONOMICS

The purpose of this department is to provide an education in those areas of learning which relate to home and family life. The curriculum has two objectives, first, to provide a sequence in General Home Economics which offers a liberal program based on the needs of women; and second, to provide several sequences which offer training in a variety of professions.

THE GENERAL HOME ECONOMICS SEQUENCE

This sequence requires 48 credit hours of Home Economics courses. Thirty-nine of these are the basic courses shown in the outline and the other nine are advanced courses. The sequence also requires 35 hours of liberal arts courses including English composition, literature, speech, psychology, economics and one year of a laboratory science, either botany or chemistry or zoology. The remaining 47 credit hours are elective.

FRESHMAN YEAR	1st SEMESTER	2nd SEMESTER	SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
*English Composition	3	3	Social Science or Literature	3	3
Social Science or Language	3	3	Household Technology	2	2
†Laboratory Science	4	4	Survey of Food Preparation	4	...
Orientation	1	1	Consumer Problems in Buying .....	...	...
Design	3	...	Textile Merchandise	3	...
Food Selection	3	...	House Planning	2	...
Textiles and Clothing Selection ...	3	...	Food Buying and Service .....	...	3
Speech .....	...	3	Home Furnishings .....	...	3
Physical Education	(1)	(1)	Elective	3	3
Hygiene	(1)	(1)	Physical Education	(1)	(1)

* Students exempted from English Composition on the basis of the placement test may substitute another English course.

† Chemistry is the required laboratory science if advanced work in Food and Nutrition is desired.



WATERMAN MEMORIAL BUILDING



LOOKING TOWARD "OLD MILL" FROM WATERMAN MEMORIAL

JUNIOR YEAR	1st SEMESTER	2nd SEMESTER	SENIOR YEAR	1st SEMESTER	2nd SEMESTER
Social Science or Literature.....	3	3	Child Care and Development.....	3	...
Required Home Economics			Required Home Economics		
Course	3-6	...	Course	3	3
Family Living .....	...	3	Advanced Course in Science.....	3	3
Home Management .....	...	3	Advanced Course in Humanities	3	3
Electives	9-12	9	Electives	6	9

THE PROFESSIONAL SEQUENCES

To permit specialization for the various professions the subject matter is divided into three major sequences. The program for freshmen is uniform for all students in the professional sequences but at the beginning of the sophomore year each student elects a "major" within one of the professional sequences. The courses required for each student are planned so far as possible to meet her particular interests.

The Home Economics Education sequence supplies a background which prepares students to teach Home Economics on the secondary level in Vermont and in some other states or to become home demonstration or 4-H club agents.

The Textile, Clothing and Related Art sequence is planned for students who are interested in the fields of textile testing, costume designing, fashion illustrating, fashion merchandising, interior decorating, and the teaching of textiles and clothing. This sequence provides background upon which a talented student may with additional study or apprentice training build a career.

The Food and Nutrition sequence is planned to prepare students for positions as dietitians, both administrative and practising, in hospitals, colleges, industry or other institutions; as nutrition or food specialists in utilities or commercial food firms; or as teachers of food and nutrition. This sequence meets the academic requirements for membership to the American Dietetic Association, which makes it possible for an able student on graduation to become a dietetics interne in a hospital approved by the Association.

Every candidate for the B.S. degree in Home Economics must present a total of 130 semester hours of credit, exclusive of courses required in physical education. Students in Home Economics Education must have a 75 average in their Home Economics subjects to be eligible for student teaching in the state during their senior year.

OUTLINE OF PROFESSIONAL SEQUENCES

UNIFORM FRESHMAN YEAR

	1st SEMESTER	2nd SEMESTER
Design	3	...
*English Composition	3	3
Principles of Economics	3	3
Food Selection	3	...
Basic Speech .....	...	3
Orientation	1	1
General Chemistry	4	4
Textiles and Clothing Selection .....	...	3
Physical Education	(1)	(1)
Hygiene	(1)	(1)

* Students exempted from English Composition on the basis of the placement test may substitute another course, normally in English.

CLOTHING AND TEXTILES

SOPHOMORE YEAR

	1st SEMESTER	2nd SEMESTER
European History or American Government	3	3
Surv. Food Prep.	4	...
Food Buying & Service .....	...	3
Household Technology	2	2
Outline of Organic Chem.	5	...
Costume Design	2	...
Clothing Construction I .....	...	3
House Planning	2	...
Elective .....	...	6
Physical Education	(1)	(1)

HOME ECONOMICS

EDUCATION

SOPHOMORE YEAR

	1st SEMESTER	2nd SEMESTER
*English	3	...
Food Preparation	3	3
Household Technology	2	2
Outline of Organic Chem.	5	...
Clothing Construction I .....	...	3
Expository Writing .....	...	3
House Planning	2	...
Elective .....	...	3
Physical Education	(1)	(1)

* A course in literature.

JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Consumer Problems in Buying Textile Merchandise	3	...
*Elementary Botany or Introduction to Zoology	4	3
General Psychology	3	3
History of Costume	3	...
Home Furnishing I .....	...	3
Family Living .....	...	3
Home Management .....	...	3
Elective	3	3

* Plus second course in biological science.

JUNIOR YEAR

	1st SEMESTER	2nd SEMESTER
Consumer Problems in Buying Textile Merchandise	3	...
Clothing Construction II	3	...
Food Preservation and Econ.	3	...
General Psychology	3	3
Rural Education	3	...
*Extension Methods .....	...	2
Family Living .....	...	3
Home Management .....	...	3
Meal Planning and Service .....	...	3
Home Furnishing I .....	...	3
Elective	3	3

* Required of Extension Education students only.

SENIOR YEAR	1st SEMESTER	2nd SEMESTER
*English	3	3
Child Care and Development	3	...
Home Furnishings II .....	...	3
Home Management House	3	...
Costume Design and Construction .....	...	3
Textiles .....	...	3
Electives	9	6

* One year of either English or American or World literature, or one semester of Periodical Writing and one semester of Expository Writing.

SENIOR YEAR	1st SEMESTER	2nd SEMESTER
Child Care and Development	3	...
Demonstration Techniques	2	...
Home Nursing	1	...
Nutrition and Diet	4	...
School Lunch Management	3	...
Methods of Teaching	2	1st half
Special Problems .....	...	2-3
Student Teaching .....	...	7
		2nd half
Home Management House .....	...	3
Problems in Home Furnishing .....	...	2

FOOD AND NUTRITION

SOPHOMORE YEAR	1st SEMESTER	2nd SEMESTER
Introduction to Zoology	4	...
Food Preparation	3	3
Household Technology	2	2
Outlines of Organic Chemistry	5	...
European History or American Government	3	3
Food Chemistry .....	...	3
General Bacteriology .....	...	3
Elective .....	...	3

JUNIOR YEAR	1st SEMESTER	2nd SEMESTER	SENIOR YEAR	1st SEMESTER	2nd SEMESTER
Consumer Problems in Buying Textile Merchandise	3	...	Child Care and Development	3	...
Biochemistry	3	...	Educational Psychology	3	...
Food Preservation and Econ.	3	...	*English	3	3
General Psychology	3	3	Nutrition and Diet	4	...
Family Living .....	...	3	Experimental Foods or Diet Therapy .....	...	3
Home Management .....	...	3	Home Management House .....	...	3
Meal Planning and Service .....	...	3	Institution Administration .....	...	3
Physiology .....	...	3	Electives	3	3
Food Production .....	...	3			
Electives	6	...			

* One year of either American or English or World Literature or one semester of Journalism and one semester of Expository Writing.

COURSES OF INSTRUCTION

CLOTHING AND TEXTILES

Professor Beresford; Mrs. Metze

- 1 DESIGN. (1-4) *Three hours. I*
The fundamentals of color and design. *Miss Beresford and Mrs. Metze*
- 2 TEXTILES AND CLOTHING SELECTION. (2-2) *Three hours. II*
Textiles, their selection and care, as a basis for appropriate personal apparel.
Prerequisite: 1. Miss Beresford
- 101 CONSUMER PROBLEMS IN BUYING TEXTILE MERCHANDISE. (1-4) *Three hours. I*
The factors of production, distribution, and consumption governing the buying of apparel and household and institutional merchandise.
Prerequisite: 2, or permission of instructor.
- 103 COSTUME DESIGN. (0-4) *Two hours. I*
Color and design fundamentals and principles applied to costume planning.
Prerequisite: 1. Miss Beresford
- 104 CLOTHING CONSTRUCTION I. (0-6) *Three hours. II*
The development of techniques of clothing construction with the ease of fabric manipulation and previous construction experience as the basis for the selection of the class problems.
Prerequisite: 2. Mrs. Metze
- 105 CLOTHING CONSTRUCTION II. (0-6) *Three hours. I, II*
The further development of construction techniques with emphasis on tailoring problems.
Prerequisite: 103. Mrs. Metze
- 106 COSTUME DESIGN AND CONSTRUCTION. (1-4) *Three hours. II*
The development of the original costume plan by draping and flat pattern design.
Prerequisite: 105. Miss Beresford
- 151 HISTORY OF COSTUME. (1-4) *Three hours. I*
History of costume as a source of inspiration for modern costume design.
Prerequisite: 103 and 104. Miss Beresford

- 154 TEXTILES. (1-4) *Three hours. II*
Textile testing and the chemical and physical properties of materials used as fabrics.
Prerequisite: 101 and Chem. 35.

SPECIAL STUDY

191 to 199. An additional course or courses, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: permission of the department. *The Staff*

EDUCATION

Assistant Professor Knowles; Miss M. Brown

- 151-152 METHODS OF TEACHING. (2-0) (1-0) *Two hours, I; One hour, II*

Methods of teaching homemaking in the junior and senior high school, including program planning and administration of homemaking departments.

Prerequisite: Agricultural Education 101.

- 154 STUDENT TEACHING. *Seven hours. II*

Observation and teaching in approved junior and senior schools under supervision.

Prerequisite: 151.

- 155 DEMONSTRATION TECHNIQUES. (0-6) *Two hours. I*

Practice in the presentation of information and the teaching of skills by visual methods.

Prerequisite: F. & N. 102.

Miss Knowles

- 156 SPECIAL PROBLEMS. *Two or three hours. II*

Individual investigation on selected study designed to meet special needs of students.

FAMILY LIVING

Drs. Russell and Corbin; Miss Fox

- 41 HOME NURSING. (0-2) *One hour. I*

The care of the family during illness.

Prerequisite: junior standing.

Miss Fox

152 FAMILY LIVING. (3-0)

Three hours. II

Origin and development, structure and function of the family in relation to present day home and social problems.

Prerequisite: Psychology 1; junior standing.

Dr. Russell

153 CHILD CARE AND DEVELOPMENT. (2-2)

Three hours. I

Growth, development, and care of the young child; opportunity for observation and participation with children of pre-school age.

Prerequisite: Psychology 2; junior standing.

Drs. Corbin and Russell

FOOD AND NUTRITION

Professor King; Associate Professor Bailey; Miss Rockwood, Mrs. Rhode

1 FOOD SELECTION. (3-0)

Three hours. I

The essential dietary requirements for growth and health with applications to individual and family groups.

Miss Bailey

2 FOOD AND NUTRITION. (1-4)

Three hours. II

The principles of food preparation with laboratory application and the fundamentals of normal nutrition. For students in Nursing Education.

Mrs. Rhode

21 SURVEY OF FOOD PREPARATION. (2-4)

Three hours. I

Basic principles of food preparation, with some laboratory application.

Miss King

22 FOOD BUYING AND SERVICE. (1-4)

Three hours. II

Factors involved in consumer purchase of foods, the planning and service of meals.

Prerequisite: 21.

Miss Rockwood

101-102 FOOD PREPARATION. (2-6)

Three hours. I, II

The scientific principles and fundamental processes underlying food preparation, with practical applications.

Prerequisite: Chemistry 1 and, concurrently, chemistry 35.

Misses King and Rockwood

103 FOOD PRESERVATION AND ECONOMICS. (1-4)

Three hours. I

The scientific principles and methods involved in the preservation of food. The factors of production, processing and distribution governing the buying of foods.

Prerequisite: 102.

Miss Bailey

Food and Nutrition, General Home Economics 133

104 MEAL PLANNING AND SERVICE. (1-6) *Three hours. II*

The principles involved and practise in planning, preparing, and serving family meals at different cost levels.

Prerequisite: 102.

Miss Bailey

151 NUTRITION AND DIET. (3-2) *Four hours. I*

The principles of human nutrition; the nutritive value of foods with application in calculating food requirements and diets for children, adults, and family groups.

Prerequisite: 102.

Miss Bailey

152 DIET THERAPY. (2-2) *Three hours. II*

The adaptations of the normal diet in conditions affected by or affecting the utilization of food.

Prerequisite: 151.

Miss Bailey

153 READINGS IN FOOD OR IN NUTRITION. *Two or three hours. II*

A critical survey of the literature on recent developments in food or in nutrition.

Prerequisite: 151.

Miss King; Miss Bailey

154 EXPERIMENTAL FOOD PREPARATION. (1-4) *Three hours. II*

Methods and techniques used in experimental work in foods. Independent laboratory study of problems in food preparation.

Prerequisite: 102.

Miss King

SPECIAL STUDY

G191 to 199. An additional course or courses, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: Permission of the department.

The Staff

GENERAL HOME ECONOMICS

Miss King and Staff

1 ORIENTATION TO COLLEGE. (1-0) *One hour. I*

The problems of adjustment to college life.

2 ORIENTATION TO HOME ECONOMICS. (1-0) *One hour. II*

Survey and evaluation of professional opportunities in Home Economics.

HOME MANAGEMENT

Assistant Professor Knowles

102 HOME MANAGEMENT. (2-2)

Three hours. II

The utilization of family resources, human and material, in terms of family living.

Prerequisite: Economics 12.

151, 152 HOME MANAGEMENT HOUSE RESIDENCE.

Three hours

Practical application of homemaking and group living in the Home Management Residence. A charge of \$9.00 per week is made to cover cost of board and operating expenses.

Prerequisite: 102.

SPECIAL STUDY

G191 to 199. An additional course or courses, designed to meet special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: Permission of the department.

The Staff

HOUSING

Professor Beresford; Assistant Professor Knowles; Mrs. Metze

21-22 HOUSEHOLD TECHNOLOGY. (1-2)

Two hours. I, II

A study of the scientific principles and their application in the selection, operation, and care of household equipment.

Miss Knowles

23 HOUSE PLANNING. (2-0)

Two hours. I

Functional housing, including problems of financing, site location, utilization of space.

Miss Knowles

102 HOME FURNISHING I. (1-4)

Three hours. II

The application of the fundamental elements of color and design to the problems involved in furnishing the home.

Prerequisite: C. & T. 101.

Mrs. Metze

104 HOME FURNISHING II. (1-4)

Three hours. II

Studies in home decorating with special emphasis given to period furnishing, its present use and influence upon modern furnishings.

Prerequisite: 102.

Miss Beresford

Home Management, Housing, Institutional Management 135

152 PROBLEMS IN HOME FURNISHING. (0-4)

Prerequisite: 102.

Two hours. II

Miss Beresford

SPECIAL STUDY

G119 to 199. An additional course or courses, designed to meet the special needs of students. Each course that meets the requirements of the Graduate Council will carry graduate credit.

Prerequisite: Permission of the department.

The Staff

INSTITUTIONAL MANAGEMENT

Associate Professor Godfrey; Miss H. Brown

101 SCHOOL LUNCH MANAGEMENT. (1-6)

Three hours. I

The organization, operation, and control of different types of school lunches. Opportunities for some practical training in menu planning, and in the buying, preparation, and serving of food in quantities.

Prerequisite: F. & N. 102.

Misses Brown and Godfrey

102 FOOD PRODUCTION. (1-6)

Three hours. II

Practical application of principles, methods, and techniques used in large quantity food preparation.

Prerequisite: F. & N. 102.

Misses Brown and Godfrey

152 INSTITUTION ADMINISTRATION. (3-0)

Three hours. II

The organization and personnel management of various types of food service units.

Prerequisite: 102.

Miss Godfrey

153 INSTITUTION MARKETING. (2-0)

Two hours. I

Present day food markets, and problems in institutional buying, with some training in buying techniques and procedures.

Prerequisite: 102.

Miss Godfrey

154 INSTITUTION EQUIPMENT. (2-0)

Two hours. II

Institution kitchen, serving room, dining room layouts, including materials, fabrication, construction, installation, operation, and care of institution equipment.

Prerequisite: 102.

Miss Godfrey

155 FOOD COST CONTROL. (1-4)

Three hours. I

The fundamental principles of accounting and a study of adequate systems of food control for various types of food service.

Prerequisite: 102.

Miss Godfrey

College of Education and Nursing

The College of Education and Nursing includes the following curricula: Elementary Education, Junior High School Education, Industrial Education, Secondary Education, Music Education, Business Education, Basic Nursing, and (for graduate nurses) Nursing Education. Each curriculum includes as much general education as is compatible with its professional objectives.

The professional objectives are indicated by the names of the curricula. The professional courses which are included are based upon the general courses and are planned to provide the background and skills essential to professional efficiency.

Ideals of personal growth and social service are kept in view as the chief objectives. Since the curricula in education are intended to develop teaching efficiency, emphasis is placed not only upon gaining an excellent background and knowledge of subjects to be taught but also upon educational theory and the development of skill in teaching. To promote the attainment of teaching efficiency, laboratory experiences and student teaching are required in each curriculum.

In addition to examinations required by the University, the National Teacher Examinations are given at the University in February of each year. They are recommended to those who wish objective measurements of certain abilities and knowledge expected of teachers and who wish to qualify for teaching in communities which require applicants to submit scores on the National Teacher Examinations.

The descriptions of the Elementary Education and Junior High School Education curricula, which follow, include certain special provisions with respect to admission, transfer of credit from normal schools and teachers colleges, and tuition. The description of the Secondary Education curriculum includes special provisions with respect to transfer of credit from normal schools and teachers colleges. There are no special provisions with respect to these matters applicable to the other curricula.

THE EDUCATION CURRICULA

THE ELEMENTARY EDUCATION CURRICULUM AND THE JUNIOR HIGH SCHOOL EDUCATION CURRICULUM

These curricula are offered by the University in cooperation with the Vermont State Board of Education. They are intended to provide an excellent preparation for teaching in the elementary schools and in the

junior high schools, respectively. The degree of Bachelor of Science in Education is conferred upon each graduate in these curricula by the University of Vermont and State Agricultural College on recommendation of the Dean of the College of Education and Nursing and the University Senate.

Students of good moral character who have been graduated from an approved high school and who satisfy the entrance requirements specified by the State Board of Education are eligible for admission if recommended by the school principal.

A student who has satisfactorily completed one year of elementary teacher preparation in this State or the first year in a standard teachers college or its full equivalent, may be admitted to sophomore standing, provided the entrance requirements have been met and a satisfactory record presented.

Graduates of the former two-year curriculum, if found qualified, may be admitted to the Elementary Education curriculum or to the Junior High School Education curriculum in junior standing. Such students will be given a special enrollment supplementing the courses accepted for advanced credit and will be eligible to receive the degree of Bachelor of Science in Education after satisfactory completion of two years of resident work.

A student who transfers from this curriculum to another in the University will receive credit for work done, varying with the curriculum to which he transfers.

ADMISSION

Graduates of secondary schools who wish to enter the curriculum in Elementary Education or the curriculum in Junior High School Education should obtain application forms from the Director of Admissions of the University. A transcript of record must be obtained from the secondary school for use as one of the bases of action on the application. The recommendation of the principal and the approval of a representative of the University, resulting from a personal interview, will be required.

Students who are to be admitted to this curriculum will be chosen on evidence of ability and aptitude for becoming efficient teachers. Admission will be granted on the basis of:

1. Health and physical fitness.
2. Probable ability to do college work.
3. Personality and character.
4. Special aptitude for teaching.

HEALTH REQUIREMENTS. A certificate of good health and physical fitness from a practicing physician must be furnished by each applicant. In addition, a physical examination is required of the applicant by the University after the beginning of the academic year.

PROBABLE ABILITY TO DO COLLEGE WORK. This is determined by means of a transcript of the student's scholastic record in the secondary school and the recommendation of the principal. In addition, tests of scholastic aptitude and of achievement in English are given at the University.

CHARACTER AND PERSONALITY REQUIREMENTS. The high school principal submits an estimate of the applicant's character and personality based on the following traits: seriousness of purpose, industry, initiative, influence, concern for others, responsibility, emotional stability.

APTITUDE FOR TEACHING. The recommendation of the principal of the high school which the applicant attended, the opinions of instructors, and psychological and achievement tests will receive consideration in judging aptitude for teaching.

ADMISSION TO ADVANCED STANDING. Candidates who apply for advanced standing will be admitted on the basis of a transcript of college work done elsewhere and the recommendation of the institution where work has been completed. No course work will be approved for transfer of credit which carries a grade of less than C or 70 per cent.

Candidates who hold a diploma from an approved high school and have completed a year of professional study as the fourth year of their high school course, may have the options of (a) entering as freshmen or (b) completing their high school credits for graduation by the substitution of satisfactory courses to replace their professional study as high school seniors. Under the conditions of (b) the professional study which they completed during the senior year in high school may be allowed toward advanced standing in the curriculum in Elementary Education.

TRANSFER OF CREDIT FROM OTHER INSTITUTIONS OF HIGHER LEARNING

Students may transfer to the Elementary or Junior High School Education curricula from various departments of this or other institutions of higher learning. Their admission is dependent upon scholastic standing and promise of success in teaching. The amount of additional work required will depend upon courses already completed and the extent to which they correlate with the courses in these curricula. It may be found that summer session work or a longer period of study than that required to complete a total of four years of resident work will be necessary.

TRANSFER OF NORMAL SCHOOL OR TEACHERS COLLEGE CREDIT

STUDENTS TRANSFERRING INTO THE ELEMENTARY EDUCATION CURRICULUM

Students who have Completed Two Years of a Teachers College Program. Students who have completed satisfactorily two years of study in a state normal school or teachers college may transfer with full credit to the third year of the curriculum in Elementary Education. Their admission is conditioned upon a transcript of their record, the recommendations of the president of the teachers college, and the approval of the State Department of Education and the Director of Admissions at the University.

Students who have Completed Three Years of a Teachers College Program. Students who have completed satisfactorily three years of study in a state normal school or teachers college may be admitted to the fourth year of the curriculum in Elementary Education. Their admission is conditioned upon a transcript of their record, the recommendations of the president of the teachers college and the State Department of Education, and the passing of appropriate performance tests showing ability to do satisfactory work of senior grade. Unless waived by reason of teaching experience, the student is asked to take courses in the summer session totalling not less than six semester hours, chosen under the direction of the Dean of the College of Education and Nursing. Thirty-six semester hours of credit, chosen under the guidance of the Dean are required to complete the curriculum in Elementary Education, unless the transcript shows that the full equivalent of the first three years of the curriculum has been completed with satisfactory attainment. In such cases a normal enrolment of thirty semester hours will enable one to meet the requirements for the degree.

STUDENTS TRANSFERRING INTO THE JUNIOR HIGH SCHOOL EDUCATION CURRICULUM

Students who have Completed Two or Three Years of a Teachers College Program. Students who have completed two or three years of study in a state normal school or teachers college may transfer to the curriculum in Junior High School Education upon the same conditions as those required of students who transfer to the curriculum in Elementary Education. Their advanced standing will depend upon the degree to which their previous study correlates with the curriculum in Junior High School Education at the University.

TUITION

FOR VERMONT STUDENTS. The Vermont State Board of Education pays the tuition of a specified number of qualified Vermont students enrolled in Elementary and Junior High School Education who sign, on a form prescribed by the State Department of Education, a declaration of intention to teach in Vermont for as long a time as that for which tuition is provided. As the purpose of this tuition payment is to provide a more adequate supply of well-qualified teachers for the elementary and junior high schools of Vermont, students whose tuition is paid by the State Board of Education are under obligation to discharge this responsibility. The number of such tuition scholarships provided by the State Board of Education is limited. Students must apply for them each year. They will be awarded upon the basis of academic standing, promise of success in teaching, financial need and order of application. Students who are already enrolled at the University should apply for these scholarships in May preceding the year for which they are desired.

FOR STUDENTS FROM OTHER STATES. Students from other states who meet the entrance requirements may be admitted to the curriculum in Elementary Education or to the curriculum in Junior High School Education. These students will be required to pay the regular tuition charges.

FOR STUDENTS WHO DO NOT PLAN TO TEACH IN VERMONT. Students from Vermont or from other states who are properly qualified, but do not plan to teach in Vermont, may be admitted to the curriculum in Elementary Education or to the curriculum in Junior High School Education at the regular tuition rate of the University.

OUTLINE OF THE ELEMENTARY EDUCATION CURRICULUM

THE FRESHMAN YEAR		1st	2nd	THE SOPHOMORE YEAR		1st	2nd
		SEMESTER				SEMESTER	
English Composition	3	3		Sophomore English	3	3	
Intro. to Education	3	..		Teaching English	3	..	
Child Development .....	..	3		Lit. for the Elem. School .....	..	3	
Economic Geography	3	3		Music Fundamentals	3	3	
Art Education	3	3		General Psychology	3	3	
Approved Elective	3	3		Laboratory Science	4	4	
Physical Education	(1)	(1)		Teaching Physical Education I	1	1	
Hygiene (Women)	(1)	(1)		Military Science (Men)	2	2	
Military Science (Men)	2	2					
THE JUNIOR YEAR		1st	2nd	THE SENIOR YEAR		1st	2nd
		SEMESTER				SEMESTER	
Speech	3	3		English Elective	3	3	
American History	3	3		Teaching Art	3	..	
Teaching Arithmetic .....	..	3		*Educational Psychology or	3	or	
Teaching Reading	3	3		Philosophy of Education .....	..	3	
Teaching Music	3	3		Teaching Physical Education II	1	1	
Teaching Soc. Stud. and Sci.	3			Practicum in Elementary			
Child and the Curric.	2	2		Education	6	6	
Health Education .....	..	2		*Approved Elective	3	or 3	

* If *Educational Psychology* is chosen, there will be an approved three hour elective in the second semester. If *Philosophy of Education* is chosen, there will be an approved three hour elective in the first semester.

A total of 129 semester hours is required for the degree, of which 67 semester hours shall be professional and 62 semester hours shall be general. In addition to the above, men enrolled in this curriculum are required to earn 8 semester hours in military science.

THE JUNIOR HIGH SCHOOL EDUCATION CURRICULUM

The Junior High School Education Curriculum is offered by the University in cooperation with the Vermont State Board of Education. It is intended primarily to prepare teachers for the upper grades of the elementary school and for junior high school positions in Vermont and other states in so far as certification requirements can be met.

The conditions regarding admission and tuition which are stated in the section above entitled The Elementary Education Curriculum apply to students who are accepted in the Junior High School Curriculum. The number of Vermont students with tuition scholarships who will be accepted in this curriculum is limited.

The degree Bachelor of Science in Education is awarded by the University of Vermont and State Agricultural College on recommendation of the Dean of the College of Education and Nursing and the University Senate.

OUTLINE OF THE JR. H. S. EDUCATION CURRICULUM

THE FRESHMAN YEAR

	1st	2nd
	SEMESTER	
English Composition	3	3
Mathematics 1	3	..
Jr. High School Math. ....	..	3
Economic Geography	3	3
Intro. to Education .....	..	3
Approved Electives	3	6
Physical Education	(1)	(1)
Hygiene (Women)	(1)	(1)
Military Science (Men)	2	2

THE JUNIOR YEAR

	1st	2nd
	SEMESTER	
English or Intermediate Foreign Language	3	3
Health Education .....	..	2
Junior High School Curriculum ..	3	3
Physical Science	3	3
*Political Science	3	3
Principles of Education or Educational Psychology	3	..
Industrial Arts or Other Approved Elective	3	3

* American Government unless completed.

THE SOPHOMORE YEAR

	1st	2nd
	SEMESTER	
Sophomore English	3	3
Biological Science	4	4
American History	3	3
General Psychology	3	3
Approved Electives	3	3
Physical Education	(1)	(1)
Military Science (Men)	2	2

THE SENIOR YEAR

	1st	2nd
	SEMESTER	
Psychology of Adolescence .....	..	3
Guidance .....	..	3
Vermont History	3	..
Organization and Management Jr. H. S.	3	..
Philosophy of Education .....	..	3
Secondary Methods and Procedures	3	..
Observation, Participation, and Teaching .....	..	3
Approved Electives	6	3

A total of 125 semester hours is required for the degree, of which 32-38 semester hours shall be professional and 87-93 semester hours shall be general. In addition, men enrolled in this curriculum will be required to earn 8 semester hours in military science.

THE INDUSTRIAL EDUCATION CURRICULUM

The curriculum in industrial education, leading to the degree of Bachelor of Science in Education, is designed for those students who wish to prepare to teach Industrial Arts in junior and senior high schools.

To give general education and to serve as a basis for the study and teaching of industrial education, it provides courses in English, mathematics, psychology, and science. General courses in education, as well as special courses in the teaching of industrial arts and in trade and industrial education, are included. Required courses in mechanical drawing, wood-working, general shop, automobile shop, and machine shop provide the knowledge and skill essential to the teacher of these subjects. Through courses in mathematics, science, and mechanical drawing the student gains command of subjects which qualify him as a teacher of related subjects in trade and industrial schools.

Suggested electives include: Calculus (Mathematics 21-22), English Literature or Advanced Composition (English 21, 22 or 18); Survey of European or Survey of American History (History 11-12 or 21, 22); American Government (Political Science 1, 2); Introduction to Philosophy (Philosophy 1); Magnetism and Electricity (Physics 141, 142); and Elementary Quantitative Analysis (Chemistry 21-22).

Those who enroll in this curriculum are required to gain twenty-four or more weeks of work experience in industry, previously approved, during the summer vacations preceding the senior year.

OUTLINE OF THE INDUSTRIAL EDUCATION CURRICULUM

THE FRESHMAN YEAR		1st 2nd SEMESTER	THE SOPHOMORE YEAR		1st 2nd SEMESTER
English Composition	3	3	Public Speaking	3	...
Mathematics 11, 12	5	5	Group Discussion .....	...	3
Industrial Educational Survey	3	...	General Psychology	3	3
Mechanical Drawing	3	3	General Physics	5	5
General Shop	3	3	Woodworking Shop	3	3
Approved Elective .....	...	3	Industrial Education 1, 2	3	3
Physical Education	(1)	(1)	Physical Education	(1)	(1)
Military Science	2	2	Military Science	2	2
THE JUNIOR YEAR		1st 2nd SEMESTER	THE SENIOR YEAR		1st 2nd SEMESTER
Principles of Economics	3	3	Secondary Methods	3	...
Educational Measurements	3	...	Student Teaching .....	...	3-6
Industrial Education 3, 4	3	3	Industrial Management	3	...
General Chemistry	4-5	4-5	Personnel Management .....	...	3
Automobile Shop	3	3	Machine Shop	3	3
Approved Elective .....	...	3	Approved Electives	6	3-6
			Philosophy of Education .....	...	3
			Educational Psychology	3	...

THE SECONDARY EDUCATION CURRICULUM

This curriculum, leading to the degree of Bachelor of Science in Education, is designed to prepare teachers for junior and senior high schools. Students who plan to teach in secondary schools should consult the Dean of the College of Education and Nursing with reference to the selection of courses.

During the first two years, students are required to take basic courses in English, foreign language, science, and social science. They may also take mathematics. They choose their fields of specialization from those subjects which they have pursued during the first two years.

TRANSFER OF TEACHERS COLLEGE OR NORMAL SCHOOL CREDIT. Students who have completed two years of study in a state normal school or teachers college may transfer to the curriculum in Secondary Education. Their admission is conditioned upon their scholastic attainment in teachers college or normal school, the recommendations of the president of the teachers college and the State Department of Education, and the passing of examinations in English and mathematics. To become eligible for the degree of Bachelor of Science in Education, these students must complete at least 72 semester hours of course work, chosen under the guidance of the Dean of the College of Education and Nursing.

PROFESSIONAL REQUIREMENTS. Candidates for the degree in secondary education are required to complete a course in General Psychology and to attain a high standard of scholarship in eighteen semester hours of course work in professional education.

"TEACHING MAJORS." Candidates for the degree in secondary education are also required to complete two "teaching majors" or one "major" and two "minors," preferably in related fields, so chosen as to correlate with subjects generally taught in high schools. The recommended major or minor fields are English, speech, foreign languages, mathematics, history, social science, biological sciences, and physical sciences.

A "teaching major" includes at least twenty-four semester hours in one subject and a "teaching minor," at least eighteen semester hours except that in English such a major is 30 semester hours and such a minor is 24 semester hours. If an elementary language is taken at the University, this will make the required number of hours in a language major 30 and a language minor 24. In meeting the major and minor requirements, subjects should be chosen which will give a relatively complete knowledge of each field. Students who elect speech as a major are required to take two minors, one of which must be English. Each student is required to take not less than two advanced courses in his major subject and one advanced course in the minors. During his senior year he should take at

least one advanced course in each field. Students are expected to maintain a high standard of scholarship in their major and minor fields. A grade of less than 72 cannot be counted toward a major or a minor unless subsequent grades in the field are sufficiently high to justify its acceptance.

STUDENT TEACHING. During the senior year, students enrolled in the Secondary Education curriculum are required to take a laboratory course in teaching. In most cases, students will spend at least three continuous weeks in a secondary school where they will follow a full teaching schedule. In so far as possible, students are advised to complete their academic subjects before the last semester of their senior year.

OUTLINE OF THE SECONDARY EDUCATION CURRICULUM

THE FRESHMAN YEAR		1st	2nd	THE SOPHOMORE YEAR		1st	2nd
		SEMESTER				SEMESTER	
English Composition		3	3	Sophomore English		3	3
Foreign Language		3	3	Foreign Language		3	3
History or Political Science		3	3	General Psychology		3	3
Laboratory Science		4	4	Approved Electives		6	6
Approved Elective		3	3	Physical Education		(1)	(1)
Physical Education		(1)	(1)	Military Science (Men)		2	2
Hygiene (Women)		(1)	(1)				
Military Science (Men)		2	2				
THE JUNIOR YEAR		1st	2nd	THE SENIOR YEAR		1st	2nd
		SEMESTER				SEMESTER	
Principles of Education or				Education Elective		3	...
Educational Psychology		3	...	Secondary Methods & Student			
Philosophy of Education or Psy-				Teaching		3	3-6
chology of Adolescence .....		...	3	English Elective		3	3
History of Education or				Approved Electives		6	3-6
Educational Measurements		3	...				
English Elective		3	3				
Approved Electives		9	9				

A total of 122 semester hours is required for the degree; from 48 to 60 semester hours shall be devoted to teaching majors and minors. In addition, men enrolled in this curriculum will be required to earn 8 semester hours in military science.

SUGGESTED SEQUENCES IN MAJOR OR MINOR FIELDS

By making use of electives, students, with the approval of their advisers and the Dean, will choose courses which will assure relatively complete preparation in the major or minor teaching fields. Additional subjects will be chosen to broaden the student's education and to increase understanding of modern civilization and its problems.

Students may select the "teaching majors" or "teaching minors" from one or the other of two general fields which represent interdepartmental sequences. They have an alternative choice of selecting from a number of special or subject fields. Suggested sequences in general science and in social science are listed below. These are followed by suggested subject sequences for the fields of English, French, German, history, Latin, mathematics, Spanish, and zoology. In addition, sequences may be arranged in botany, chemistry, economics, physics, political science, or speech.

SUGGESTED SEQUENCES IN GENERAL FIELDS

GENERAL SCIENCE

<i>First Year</i>	<i>Semester Hours</i>
General Botany or Introduction to Zoology.....	8
<i>Second Year</i>	
General Chemistry or General Physics	10
<i>Third Year</i>	
A third elementary science or An intermediate course in science	8-10
<i>Fourth Year</i>	
A fourth elementary science An intermediate or advanced course in science	8-10
	<u>42-48</u>

GENERAL SOCIAL SCIENCE

<i>First Year</i>	<i>Semester Hours</i>
European History	6
American Government	6
<i>Second Year</i>	
American History	6
International Relations	6
<i>Third Year</i>	
A third course in History or in Political Science	6
Principles of Economics	6
<i>Fourth Year</i>	
Two advanced courses chosen from History, Political Science, or Economics.....	12
Total semester hours in social science	<u>48*</u>

* Additional electives may be chosen from courses in social science subject fields.

SUGGESTED SEQUENCES IN SUBJECT FIELDS

Each of the following lists contains the names of courses which are suggested for election during the *four* years. The actual year in which a particular course is taken will be determined by such factors as individual needs and the completion of prerequisites.

ENGLISH

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
English Composition	3	3	English Composition	3	3
English Literature	3	3	English Literature	3	3
Shakespeare	3	3	Shakespeare	3	3
*Advanced Composition	3		*Advanced Composition	3	
Public Speaking	3		Public Speaking	3	
American Literature	3	3			

* If students are excused from Freshman composition, they are required to take a course in advanced composition.

FRENCH

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Intermediate French	3	3	Intermediate French	3	3
Introduction to French Literature	3	3	Introduction to French Literature	3	3
French Literature: 19th Century	3	3	Conversation and Composition	3	3
Conversation and Composition	3	3			

An additional course in French Literature would be desirable.

GERMAN

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Elementary German	3	3	Elementary German	3	3
Intermediate German	3	3	Intermediate German	3	3
Introduction to German Literature	3	3	Introduction to German Literature	3	3
Advanced Composition and Conversation	3	3			

HISTORY

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Survey of European History	3	3	Survey of European History	3	3
Survey of American History	3	3	Survey of American History	3	3
Europe in the Modern Age	3	3	Contemporary History	3	3
Contemporary History	3	3			

A course in American Government is recommended also.

LATIN

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Latin Prose and Poetry	3	3	Elementary Latin	3	3
Catullus, Pliny, Horace	3	3	Intermediate Latin	3	3
Prose Composition	3	3	Latin Prose and Poetry	3	3
Teaching Latin in Secondary Schools .....	...	3	Catullus, Pliny, Horace	3	...
Latin Elective	3	...			

MATHEMATICS

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Freshman Mathematics	5	5	Freshman Mathematics	5	5
Calculus	3	3	Calculus	3	3
Projective Geometry	3	3	Recommended:		
Recommended:			General Physics	5	5
General Physics	5	5			

SPANISH

MAJOR SEQUENCE	1ST SEMESTER	2ND SEMESTER	MINOR SEQUENCE	1ST SEMESTER	2ND SEMESTER
Elementary Spanish	3	3	Elementary Spanish	3	3
Intermediate Spanish	3	3	Intermediate Spanish	3	3
Introduction to Spanish Literature	3	3	Introduction to Spanish Literature	3	3
Conversation and Composition	3	3			

ZOOLOGY

MAJOR SEQUENCES	1ST 2ND SEMESTER		MINOR SEQUENCE	1ST 2ND SEMESTER	
Introduction to Zoology	4	..	Introduction to Zoology	4	..
Vertebrate Zoology	4	4	Vertebrate Zoology	4	4
General Entomology	4	4	Heredity	3	..
<i>or</i>			<i>and</i>		
Comparative Anatomy	4	..	Eugenics	3	..
<i>and</i>			<i>or</i>		
Vertebrate Embryology	4	..	Comparative Anatomy	4	..
<i>or</i>			<i>and</i>		
Heredity	3	..	Vertebrate Embryology	4	..
<i>and</i>					
Human Genetics and Eugenics ..	3				

THE MUSIC EDUCATION CURRICULUM

The University of Vermont and State Agricultural College offers this four-year curriculum in Music Education leading to the degree of Bachelor of Science in Music Education. It is recommended to students who have sufficient training and natural musical ability to justify a career in music. Graduates are qualified for positions as instructors and supervisors of music in the public schools of Vermont. The curriculum may be adapted to meet requirements elsewhere.

Students must pass the aptitude tests given by the Department of Music and must satisfy the general admission requirements of the University.

THE FRESHMAN YEAR	1st 2nd SEMESTER		THE SOPHOMORE YEAR	1st 2nd SEMESTER	
Survey of Musical Literature.....	3	3	Elementary Harmony	3	3
Elementary Sight-Singing	3	3	Advanced Sight-Singing	3	3
Applied Music (two courses)....	2-3	2-3	Applied Music (two courses)....	2-3	2-3
English Composition	3	3	Sophomore English Elective	3	3
Elementary German	3	3	Intermediate German	3	3
Laboratory Science	3-5	3-5	General Psychology	3	3
Choir or Orchestra	1	1	Choir or Orchestra	1	1
Physical Education	(1)	(1)	Physical Education	(1)	(1)
Military Science (Men)	2	2	Military Science (Men)	2	2
Hygiene (Women)	(1)	(1)			
THE JUNIOR YEAR	1st 2nd SEMESTER		THE SENIOR YEAR	1st 2nd SEMESTER	
Advanced Harmony	3	3	Orchestration and Conducting....	3	3
Methods & Practice Teaching ..	3	3	Sec. Meth. & Prac. Teaching....	3	3
Applied Music (two courses)....	2-3	2-3	Applied Music Methods	1	1
Greek Art: European Painting....	3	3	History of Music	3	3
Education, Prin. & Phil.	3	3	Applied Music (two courses)....	2-3	2-3
Choir or Orchestra	1	1	Elementary Italian	3	3
			Choir or Orchestra	0	0

THE CURRICULUM IN BUSINESS EDUCATION

The curriculum in Business Education is intended to prepare teachers of business subjects for the secondary schools.

THE FRESHMAN YEAR

	1st	2nd
SEMESTER		
Economic Geography	3	3
English Composition	3	3
Algebra, Math. of Finance	3	3
Foreign Language or American Government	3	3
Introduction to Business	3	3
Military Science (Men)	2	2
Physical Education	(1)	(1)
Hygiene (Women)	(1)	(1)

THE SOPHOMORE YEAR

	1st	2nd
SEMESTER		
English or American Lit.	3	3
Prin. of Economics	3	3
Prin. of Accounting	3	3
General Psychology	3	3
Foreign Language, American Government, or History	3	3
Military Science (Men)	2	2
Physical Education	(1)	(1)

THE JUNIOR YEAR

	1st	2nd
SEMESTER		
Advanced Accounting or Approved Elective	3	3
Business Correspondence	3	3
Elementary Shorthand	4	4
Elementary Typewriting	3	3
Educational Psychology	3	...
Principles of Business Ed. ....	...	3
Business Law	3	3

THE SENIOR YEAR

	1st	2nd
SEMESTER		
Advanced Shorthand	4	4
Advanced Typewriting	3	3
Secretarial Prin. and Prac.	3	3
Office Techniques and Machines ..	3	...
Teaching Business Subjects	3	...
Observation and Student Teaching .....	...	3-4
Philosophy of Education .....	...	3
Education Elective	3	...

AGRICULTURAL EDUCATION

The curriculum in Agricultural Education, designed to prepare teachers of vocational agriculture for the secondary schools, is offered in the College of Agriculture.

HOME ECONOMICS EDUCATION

An Home Economics Education sequence is offered by the Department of Home Economics in the College of Agriculture. Students who take this course are qualified to teach Home Economics in the secondary schools of Vermont and certain other states, or to become home demonstration or 4-H Club agents.

COURSES OF INSTRUCTION

ELEMENTARY EDUCATION

Associate Professors Crabbe, Cummings, and Pappoutsakis; Assistant Professors Adams and Sullivan; Mrs. Mills.

1 INTRODUCTION TO EDUCATION. *Three hours. I*

A survey of American education; the aims and underlying principles; the elements of psychology as applied to the learning process. Observation in demonstration and other public schools. *Mrs. Adams*

2 CHILD DEVELOPMENT AND BEHAVIOR. *Three hours. II*

The physical, mental, social, and emotional development of the child; a study of methods of guiding this development. Observation in elementary schools. *Mrs. Adams*

5-6 ART EDUCATION. *Three hours. I, II*

The development of creative ability and art appreciation through drawing, painting, lettering, and crafts. Two double periods.

Mrs. Mills

For ARTS AND CRAFTS see Art 11, 12.

7, 8 ADVANCED ARTS AND CRAFTS. *Three hours. I, II*

Advanced arts and crafts, with emphasis on educational and therapeutic values. (Offered in alternate years, 1952-53.)

Prerequisite: Art 11, 12 *Mrs. Mills*

11-12 SCHOOL MUSIC I. *Three hours. I, II*

Ear training, music reading and writing, elementary theory, history and appreciation. *Mr. Pappoutsakis*

13-14 SCHOOL MUSIC II. *Three hours. I, II*

Basic principles in elementary school music teaching.

Prerequisite: School Music I. *Mr. Pappoutsakis*

21-22 TEACHING READING. *Three hours. I, II*

21 Principles. Principles underlying the teaching of reading; materials of instruction; reading readiness; vocabulary development; development of correct study skills; observation in the demonstration school.

22 Diagnosis and correction. Special emphasis upon diagnosing reading disabilities; use of standard tests; corrective measures; improvement of reading and study skills.

Prerequisite: Elementary Education 1-2; Psychology 1-2; 21 or teaching experience for 22.

32 TEACHING ARITHMETIC.

Three hours. II

Subject matter and modern methods of presentation; the aims and principles of teaching arithmetic; the use of standard tests in arithmetic; observation in the demonstration schools.

Mrs. Adams

33 TEACHING ENGLISH.

Three hours. I

An analysis of modern trends in teaching the language arts: oral and written expression, spelling, handwriting, and literature; a study of the principles and techniques of teaching them. Observation in the demonstration school.

Miss Sullivan

34 LITERATURE FOR THE ELEMENTARY SCHOOL.

Three hours. II

Literature "old and new" for children. The course aims to acquaint students with the great body of both traditional and modern literature in prose and poetry, to help them to appreciate literature suitable for children at different age levels, and to establish some criteria for judging books for children. The principles and techniques of story telling, as well as practice in this art, are an integral part of this course.

Miss Sullivan

41 TEACHING SOCIAL STUDIES AND SCIENCE.

Three hours. I

Subject matter and procedures applicable to the teaching of social studies including geography, history, and topics of current importance; the teaching of elementary science; the integration of social science and elementary science with other subjects of the elementary school; observation in the demonstration schools.

Mr. Huden

42 AUDIO-VISUAL AIDS.

Three hours. II

A study of audio-visual aids in instruction and learning; sources of materials; development of skill in using motion pictures and other audio-visual aids. (Offered in alternate years, 1951-52.)

43-44 THE CHILD AND THE CURRICULUM.

Two hours. I, II

The organization and management of the school and the application of principles and techniques in the various areas of the curriculum. The aim is to familiarize students, through observation and participation, with the objectives and practices in the elementary school and with some instructional materials used in these practices.

Miss Sullivan

61-62 TEACHING PHYSICAL EDUCATION I.

One hour. I, II

The theory of play, the contribution of physical activities to the mental and physical well-being of children; a repertoire of recreational activities for each elementary grade; preparation in methods of teaching; evaluation of results.

Miss Cummings

101 TEACHING ART.

Three hours. I

Purposes, methods, and problems of modern art education are studied and discussed. Students explore the possibilities of various media and processes.

Mrs. Mills

105-106 PRACTICUM IN ELEMENTARY EDUCATION.

Six hours. I, II

The development of competence in teaching, through applying the principles and techniques previously studied. Guided practice teaching under skilled critic teachers; a review of the curriculum, including materials of instruction, organization and management of the elementary school, and professional and community relationships.

Prerequisite: senior standing.

Miss Sullivan and Staff

111-112 TEACHING PHYSICAL EDUCATION II.

One hour. I, II

The development of a program of physical activities to promote the best physical development of pupils in the elementary schools; the teaching of physical activities including games and folk dances; the organization of school and playground activities, including supervised and pupil initiated games; observation, participation, and student teaching.

Miss Cummings

116 HEALTH EDUCATION.

Two hours. II

The development of a program of health education for the elementary school including health appraisal, health needs, health adjustments, and conservation based upon scientific knowledge of the developing human body and its functioning.

Miss Crabbe

JUNIOR HIGH SCHOOL EDUCATION

Professors Huden and Pearl; Assistant Professors Adams and Dean

2 JUNIOR HIGH SCHOOL MATHEMATICS.

Three hours. II

A review of arithmetic and elementary algebra from the viewpoint of the prospective junior high school teacher; the aims and objectives determining the selection and presentation of subject matter; selected advanced topics in arithmetic; development of skill in computation and in solving problems; use of computing devices; graphs and scale drawings.

Prerequisite: Mathematics 1.

Mr. Huden

50 GUIDANCE.

Three hours. II

The underlying principles of guidance and the development of a guidance program for the school; the organization of the school program to meet individual needs of pupils; the use of tests in guidance; ways of meeting personality and behavior problems; the guidance func-

tion of the home room; the development and use of cumulative records; counseling pupils with reference to ethical and health problems; leisure time activities, educational programs and vocational goals.

Prerequisite: Sec. Education 1 or 7.

Mr. Pearl

61-62 THE JUNIOR HIGH SCHOOL CURRICULUM. *Three hours. I, II*

The curriculum of the junior high school, its objectives and content; proper grade placement of curriculum content; laboratory experience in junior high schools; appropriate teaching procedures: observation and participation in various subject fields and on different grade levels; appraisal of the results of educational effort.

Prerequisite: Psychology 1-2.

Mr. Pearl and Staff

101 ORGANIZATION AND MANAGEMENT. *Three hours. I*

The organization, administration, and management of the junior high school for the efficient attainment of educational objectives; the establishment of desirable routine; the practice of democratic procedures; the attainment of individual and group self-discipline.

Prerequisite: Psychology 1; Jr. H. S. Ed. 50.

Mr. Pearl

108 OBSERVATION AND STUDENT TEACHING. *Three to six hours. II*

The integration of the various subjects in the junior high school education curriculum on the operative level through directed experience; the development of teaching competence and efficient school and class control, leading to individual and group self-discipline and good citizenship on the part of pupils; experience in discharging the responsibilities of the teacher to the school and the community; instructional planning; observation, participation, and directed teaching leading to responsible student teaching.

Prerequisite: 61-62; 101; Sec. Ed. 107.

Mr. Pearl

111 VERMONT HISTORY. *Three hours. I*

The political, industrial, economic and social development of Vermont from the period of settlement to the present; the influence of Vermont in the federal union; the part played by the State in national emergencies and enterprises.

Prerequisite: senior standing; History 21, 22.

Mr. Dean

***SECONDARY EDUCATION**

Professors Douglass, Carpenter, Huden and Pearl; Assistant Professors Adams and Turner

1 PRINCIPLES OF EDUCATION. *Three hours. 1*

The aims and principles of American education; the organization of the public school system; enrollments; qualifications of teachers; study of the curriculum; principles of learning.

Prerequisite: junior standing; Psychology 1.

Mrs. Adams

3 HISTORY OF EDUCATION. *Three hours. 1*

The historical development of educational theory and practice as influenced by the leading educational theorists and by the most significant social movements with emphasis on modern developments.

Prerequisite: junior standing; Psychology 1.

Mr. Douglass

7 EDUCATIONAL PSYCHOLOGY. *Three hours. 1*

The application of psychological principles and the results of experiments and investigations to the instructional process; the influence of heredity, growth, learning, and the physical and social environments upon the individual; the measurement of intelligence and achievement.

Prerequisite: junior standing; Psychology 1.

Mr. Huden

8 PSYCHOLOGY OF ADOLESCENCE. *Three hours. 11*

The growth of youth from the close of childhood to the threshold of adulthood; the physical, emotional, social, moral, and intellectual development of boys and girls.

Prerequisite: junior standing; Psychology 1.

Mr. Huden

G102 PHILOSOPHY OF EDUCATION. *Three hours. 11*

Educational theory based upon psychological principles, the contributions of leading educational philosophers, and present day social needs; the relationships of education to social welfare and the demands made upon education by a democratic society.

Prerequisite: junior standing; one course in Education.

Mr. Douglass and Mrs. Adams

G104 HIGH SCHOOL ADMINISTRATION. *Three hours. 11*

The objectives, administration, and supervision of the secondary school with particular reference to community and professional relationships; pupil guidance; curricular and extra-curricular activities.

Prerequisite: junior standing; Sec. Ed. 1 or 3.

Mr. Douglass

* Students who plan to teach in secondary schools are referred to the following courses in other departments: Agricultural Education; Advanced English Composition; Composition and Conversation in French, German, and Spanish; Home Economics Education; Latin Composition; and Music Education.

G107 SECONDARY METHODS AND PROCEDURES.

Three hours. I

General methods of secondary school instruction; problems of classroom management; pupil diagnosis and guidance; observation and participation in selected secondary schools of the State.

Prerequisite: satisfactory completion of Sec. Ed. 1; senior standing; high standing in professional subjects and in the field of specialization; approval by the Department of Secondary Education and the department in which the student is specializing.

Mr. Pearl

G108 STUDENT TEACHING IN SECONDARY SCHOOLS.

Three to six hours. II

Students are assigned to observe, participate in classroom work, and teach in junior or senior high school classes. Their teaching is directed, observed, and criticized by critic teachers, the supervisors of student teaching, and the principals of the schools. Class conferences are held each week. Individual conferences with critic teachers, the supervisors of student teaching, and the principals occur at frequent intervals.

Prerequisite: satisfactory completion of 107; high standing in professional subjects and in the field of specialization; approval by the Department of Secondary Education and by the department in which the student is specializing.

Messrs. Pearl and Perkins

G111 EDUCATIONAL MEASUREMENTS.

Three hours. I

An introductory course dealing with the essential principles of measurement in education. Topics include statistics applied to education; improvement of teacher-made measures of achievement; construction of objective tests and inventories; analysis of standard tests.

Prerequisite: junior standing; Psychology 1.

Mr. Huden

G125 TEACHING SOCIAL STUDIES IN SECONDARY SCHOOLS.

Three hours. I

Special methods in the field of social studies; aims and objectives; motivation; individual differences; selection of teaching material and visual aids.

Prerequisite: 107 or concurrent enrollment in 107; 18 semester hours in social studies.

Mr. Huden

G127 TEACHING SCIENCE IN SECONDARY SCHOOLS.

Three hours. II

A broad view of modern teaching philosophy and how it may be applied in teaching science through methods proved by experience to be workable and effective.

Prerequisite: 107; 18 semester hours in science.

Mr. Huden

G152 TEACHING LATIN IN SECONDARY SCHOOLS. *Three hours. II*

The place of Latin in the curriculum; the aims of Latin teaching; ways of studying vocabulary, syntax, and derivatives; the selection and use of textbooks and illustrative material. Required for recommendation to teach Latin.

Prerequisite: Latin 102.

Mr. Turner

156 TEACHING MATHEMATICS.

Three hours. II

The place of mathematics in the curriculum, organization of subject matter, aims and practices in teaching. (Offered in alternate years, 1952-53.)

Prerequisite: junior standing; Calculus.

Mr. Huden

G157 TEACHING MODERN LANGUAGES.

Three hours. I

A survey of past and present-day methods and procedures, including those sponsored by the Army and Navy. Readings in textbooks, periodicals, and other publications.

Prerequisite: junior standing; concentration in modern language.

Mr. Carpenter

G201, 202 EDUCATIONAL SEMINAR.

Three hours. I, II

Problems in present-day education studied by individuals and the class; methods of investigation and standards for the presentation of material; thesis writing; presentation of individual and committee reports.

Prerequisite: graduate standing.

Messrs. Douglass and Huden

BUSINESS EDUCATION

Associate Professor Nulty

102 PRINCIPLES OF BUSINESS EDUCATION.

Three hours. II

Basic principles, practices, and problems of and trends in business education.

Prerequisite: Psychology 1; Secondary Education 1 or 7.

Miss Nulty

105 TEACHING BUSINESS SUBJECTS.

Three hours. I

Principles and techniques in the organization and the teaching of business subjects in the high school.

Prerequisite: 102

Miss Nulty

110 OBSERVATION AND STUDENT TEACHING.

Three or four hours. II

Directed observation and supervised practice in teaching business subjects in a junior or senior high school in or near Burlington. General conference once a week; individual conferences with supervisors and training teacher. Continuation of the study of special methods.

Prerequisite: senior standing 105; approval of Departments of Education and Economics.

Miss Nulty

INDUSTRIAL EDUCATION

*Messrs. Graeme, Havens, Lance, Marshall and Perkins*1 PRINCIPLES OF VOCATIONAL EDUCATION. *Three hours. I*

The history, principles, and problems, including the early apprenticeship system; state and federal legislation and aid; modern trends in industrial education and industrial arts education. *Mr. Perkins*

2 METHODS IN VOCATIONAL EDUCATION. *Three hours. II*

The basic methods of industrial education; an integration of general and special methods of instruction effective in industrial education with the procedures used in analyzing a trade or occupation for determining the instructional content and arrangement of trade content into courses of instruction. *Mr. Perkins*

3 DEVELOPMENT OF INSTRUCTIONAL MATERIAL. *Three hours. I*

Factors underlying appropriate selection and preparation of material, the material available from various industrial companies, and the development of plans for effective presentation. *Mr. Perkins*

4 TEACHING INDUSTRIAL AND RELATED SUBJECTS. *Three hours. II*

Making the necessary connections between the more general courses in education and the specific teaching of industrial subjects, based upon psychological aspects of learning as applied to shop and related subjects, lesson plans, textbooks, notes, demonstration, conference, testing, and audio-visual aids. *Mr. Perkins*

7 INDUSTRIAL EDUCATION SURVEY. *Three hours. I, II*

An introduction to the problems and procedures of teaching industrial arts and trade and industrial subjects. The course includes trips to various high schools for the observation of shop organization and teaching methods, and during class time, the students' observations are analyzed and discussed. *Mr. Perkins*

31-32 WOODWORKING SHOP. (0-9) *Three hours. I, II*

Designed to give familiarity with the different types of material, experience in the use of machinery and hand tools while producing various practical articles of craftsmanship. (Offered in alternate years, 1952-53.) *Mr. Lance*

33-34 GENERAL SHOP. (0-9) *Three hours. I, II*

Designed to aid the prospective teacher to plan and conduct classes in shop work using modern materials and methods. (Offered in alternate years, 1951-52). *Mr. Lance*

37-38 AUTOMOBILE SHOP. (0-9).

Three hours. I, II

Practical work on the repair and maintenance of automobiles and internal combustion engines. Laboratory and conference periods according to the needs of the student. (Offered in alternate years, 1951-52.)

Mr. Havens

39-40 MACHINE SHOP. (0-9)

Three hours. I, II

Machine practice, operating standard machine tools, producing various machines and small tools to be used later as projects in courses in the schools. (Offered in alternate years, 1952-53.)

Mr. Marshall

NURSING

BASIC NURSING CURRICULUM

This four and one-half year curriculum is designed to provide the elements of a general college education together with the professional education for nursing. On completion of the program the student receives the degree of Bachelor of Science in Nursing.

The first year is spent at the University. Following this year there is a summer session of ten weeks, during which the student has an introduction to nursing arts with supervised practice in the Mary Fletcher Hospital, which adjoins the campus.

The second and third years are spent in hospital schools of nursing which are cooperating with the University in providing clinical instruction and nursing experience: Children's Hospital in Philadelphia, Butler Hospital School of Psychiatric Nursing Education in Providence, and the Mary Fletcher Hospital. During the first year in the clinical affiliation fifteen hours of college credit will be carried at the University. During these years there are in general six hours a day for clinical experience in hospitals and two hours a day for class instruction.

In the fourth year there is a two months' affiliation in public health nursing with the Visiting Nurse Association of Providence, R. I. The remainder of the semester is spent at the University completing nursing courses. At this time the student is eligible to take the examinations for qualification as a registered nurse.

The second semester of the fourth year and the first semester of the fifth year are spent at the University with further study in academic and professional subjects.

Applicants must satisfy general admission requirements of the University. High school courses in biology and chemistry are highly desirable.

Following is an outline of the course of study.



SKIING ON THE CAMPUS

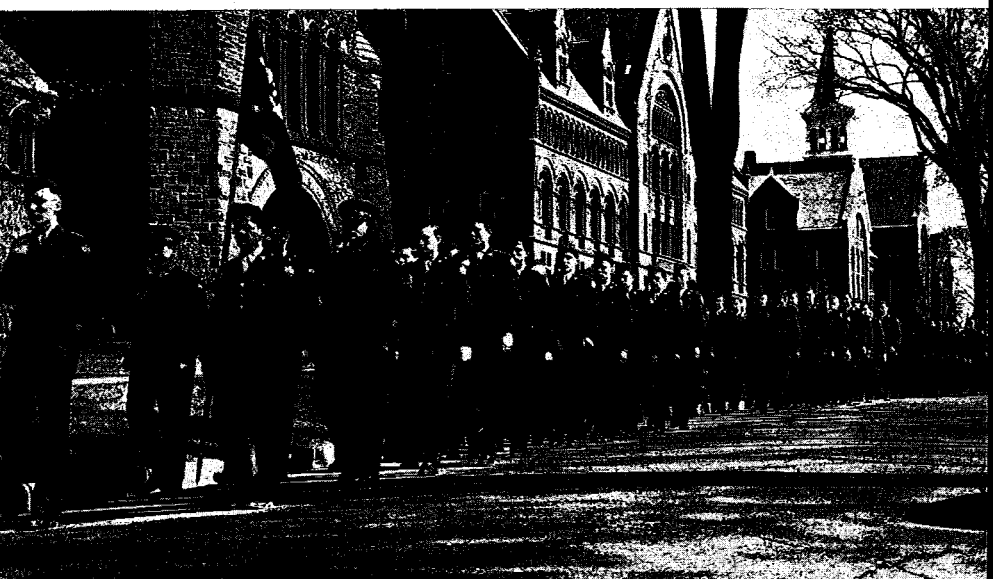
KAKE WALK ICE SCULPTURE





THE FRESHMAN PICNIC ON REDSTONE CAMPUS

HEADING FOR FEDERAL INSPECTION



FIRST YEAR	1st 2nd SEMESTER		FOURTH YEAR	1st 2nd SEMESTER	
English Composition	3	3	Social and Health Aspects of Nursing	3	...
Chemistry (Applied to Nursing)	5	4	Nursing Seminar	3	...
Zoology	4	...	Research in Nursing	3	...
Human Anatomy .....	...	4	History	3	...
History of Nursing	3	...	Philosophy	3	...
Orientation to Nursing, incl. Hygiene	2	3	*Electives	9	...
Pharmacology .....	...	1			
Physical Education	(1)	(1)			
FIFTH YEAR					
FIRST SUMMER SESSION—10 weeks			English	3	...
Bacteriology	4		History	3	...
Nutrition and Cookery	3		Nursing Seminar	3	...
Nursing Arts	2		*Electives	9	...
SECOND YEAR			* Electives may include Philosophy, Eco- nomics, Principles of Teaching, Child Psychology, Abnormal Psychology, and Family Relations.		
Speech	3	...			
Psychology	3	3			
Sociology	3	3			

NURSING EDUCATION CURRICULUM FOR GRADUATE NURSES

The University offers a curriculum in Nursing Education for nurses who meet its entrance requirements and are graduates of accredited schools of nursing, leading to the degree of Bachelor of Science in Nursing Education. There are three fields of concentration: Teaching Nursing Arts, Teaching a Basic Science, and Management of the Hospital Nursing Unit and Clinical Teaching.

Credit toward this degree, up to a maximum of forty-five semester hours, is allowed for work completed at an approved hospital school of nursing. The amount of credit to be allowed is determined by an examination which is given during the first semester to all who have enrolled for work toward a degree. The test is administered in cooperation with and scored by the Department of Measurement of the National League of Nursing Schools. A fee of \$5.00 is charged for this examination.

As candidates for the degree, students are required to complete the following: English, 12 hours; History, 6 hours; Biological Science, 8 hours; Psychology, 6 hours; Economics, 6 hours; Sociology, 6 hours; courses in Anatomy and Physiology, Bacteriology, and Pharmacology; and the professional courses. Other courses in science and education may be advised, depending on the field of concentration.

The following professional courses are recommended in all programs: Foundations of Nursing, Trends in American Nursing, Principles of Teaching, Social and Health Aspects of Nursing, Principles of Public Health Nursing, and Curriculum in Nursing. In addition, students who wish to prepare for teaching Nursing Arts are expected to carry the following: Evaluation and Reconstruction of Nursing Arts, Comparative Nursing Practice, Management of the Hospital Nursing Unit, Clinical Teaching, and supervised field experience in teaching Nursing Arts. Students who wish to prepare for positions as supervisors, head nurses, and clinical instructors are expected to take courses in Management of the Hospital Nursing Unit and Clinical Teaching. All students may be required to complete six credit hours of field experience in their field of concentration. Students who wish to prepare to teach a basic science will have additional courses in Chemistry, Anatomy and Physiology, and Bacteriology with experience in student teaching in one of these.

COURSES OF INSTRUCTION

Associate Professors Crabbe, Gallagher; Assistant Professors Lamden, Oakey, Oakley, Plaisted, Schein; Misses Fox, Ichter, Rockwood

BASIC NURSING COURSES

1-2 ORIENTATION TO NURSING (HYGIENE). *One hour; two hours. I, II*

Introduction to Posture and Body Mechanics through personal application. An orientation to the study of nursing through an understanding of health conservation and its relationships to the individual and the profession.

Misses Fox and Plaisted

3 ELEMENTARY NURSING ARTS.

Five hours. Sum.

Basic principles, techniques, and skills of nursing, with emphasis on an approach to the patient as an individual. The principles of hygienic measures, hospital housekeeping, and the role of the nurse as teacher. Class instruction, demonstrations, and supervised hospital practice. Freshman year.

Miss Fox

4 INTERMEDIATE NURSING ARTS.

Five hours. Sum.

Principles underlying more advanced nursing measures and skills, including the principles and practice of medical and surgical aseptic technique, administration of medications and irrigations, application of heat and cold, care of the acutely and chronically ill, bandaging, and

emergency nursing. Class instruction, demonstrations, and supervised hospital practice. Sophomore year.

Prerequisite: 1.

Miss Fox

5 HISTORY OF NURSING.

Three hours. I

The historical development of nursing from the Christian era to the present, tracing the rise of nursing as an educational system.

Miss Crabbe

6 PROFESSIONAL ADJUSTMENTS.

One hour. Sum.

An orientation to the personal and professional adjustments inherent in a career in nursing.

Miss Crabbe

7 PHARMACOLOGY I.

Two hours. Sum.

Methods of making solutions and calculating dosages; the nurse's responsibility in the administration of medicines; the physiological action, therapeutic uses, dosages, and toxicology of commonly used drugs.

Miss Oakley

9-10 CHEMISTRY FOR NURSES.

Five hours; four hours. I, II

Inorganic, organic and biological chemistry with special emphasis on the integration of the principles of chemistry in situations dealing with sickness and health. The course is taught in the Medical School.

Messrs. Schein and Lamden

12 BACTERIOLOGY.

Four hours. II

Principles of bacteriology as applied to nursing; sources of infection, resistance to disease, and production of immunity. Lectures, demonstrations, laboratory.

Drs. Gallagher and Oakley

13-14 HUMAN ANATOMY.

Three hours. I, II

A survey of the gross and microscopic structure of the human body.

Miss Ichter

101-102 NURSING SEMINAR.

Three hours. I, II

An integration of scientific principles of chemistry, physiology, and microbiology in total nursing situations. Typical disease conditions are presented and nursing care plans are analyzed. Open to basic students in the fifth year and to a limited number of graduate nurses by permission.

Miss Crabbe

The following unnumbered courses are taught during the third and fourth years in the schools affiliated with the following hospitals: Children's Hospital of Philadelphia, Butler Hospital of Providence, and Mary Fletcher Hospital.

MEDICAL DISEASES AND MEDICAL NURSING INCLUDING MEDICAL SPECIALTIES: The development of medical science, causes and manifestations of disease; etiology, symptoms, clinical signs, treatment and prevention of medical diseases, discussions and demonstrations of nursing procedures and nursing care studies. Three months' experience in the care of medical patients on the hospital wards is correlated with the instruction.

SURGICAL NURSING INCLUDING SURGICAL SPECIALTIES: Causes, symptoms, treatment, and prevention of surgical conditions. The principles and methods of surgical asepsis, nursing care of surgical patients, including social, emotional, and mental aspects. Along with the class instruction and clinics the students are assigned for four months to the care of a wide variety of patients with surgical conditions.

PSYCHIATRIC NURSING: The more common psychiatric disorders; problems surrounding hospitalization, special therapeutics. The course is taught in a psychiatric hospital during a three months' affiliation in experience in the care of the mentally ill.

PEDIATRIC NURSING: The growth and development of the child; principles in the care of well and sick infants and children; lectures and clinical presentation of the etiology, symptoms, and treatment of diseases of infancy and childhood; given during a three months' affiliation in a hospital for children.

PHARMACOLOGY II: The more commonly used drugs, their relation to the treatment of disease, dosage, administration, physiological and therapeutic actions, idiosyncrasies, cumulative and minor toxic symptoms, antidotes and emergency treatments.

ADVANCED NURSING ARTS: The more comprehensive nursing techniques and skills in the care of the patient. Demonstrations and discussions of complete nursing care.

OBSTETRIC AND GYNECOLOGICAL NURSING: Deals with anatomical, physiological, and pathological aspects of pregnancy and care of the newborn; emphasis is placed on nutritional and emotional needs and family relationships.

DIET THERAPY: Deals with principles and methods of handling special dietaries in the treatment of disease; includes practice in teaching patients and their families to adjust to dietary needs.

NURSING EDUCATION (FOR GRADUATE NURSES)

103. EVALUATION AND RECONSTRUCTION OF NURSING TECHNIQS.

Three hours. I or II

The use of scientific principles and methods in analyzing, comparing, and reconstructing nursing procedures. Opportunity for class discussion, criticism and revision.

Miss Fox

104. TEACHING NURSING ARTS.

Three hours. I or II

The objectives of the course in nursing arts, the subject matter and methods of presentation, demonstration of nursing methods and techniques, methods of supervision in the classroom and hospital, the development of an adequate outline of instruction to meet the needs of the student.

Miss Fox

108 PRINCIPLES OF TEACHING.

Three hours. I or II

The development of sound educational procedures and principles for effective and successful classroom teaching; the guidance and fostering of learning; management techniques; the qualities of the effective teacher; evaluating teaching.

Miss Crabbe

109 THE CURRICULUM IN NURSING.

Three hours. I or II

Principles and methods of curriculum making; philosophy, aims, sources, and techniques in planning the program of study. Problems of installing the curriculum; selection and use of textbooks; arrangement and general content of course of study.

Prerequisite: Principles of Teaching, Educational Psychology, permission of the instructor.

Miss Crabbe

113 MANAGEMENT OF THE HOSPITAL NURSING UNIT.

Three hours. I or II

The nursing service, principles of management, organization and management of the personnel, teaching responsibilities of the head nurse.

Prerequisite: Educational Psychology, permission of the instructor.

Miss Oakley

114 CLINICAL TEACHING.

Three hours. I or II

The organization of clinical teaching; evaluation of the results.

Prerequisite: Educational Psychology, Principles of Teaching, Management of the Hospital Nursing Unit, clinical experience as head nurse, permission of the instructor.

*Miss Oakley*116 SOCIAL AND HEALTH ASPECTS OF NURSING. *Three hours. I or II*

Major social and health problems and the related responsibilities of the nursing profession; analysis of complete patient care in the home

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and community; methods for integration of social and health aspects in the nursing school curriculum. *Miss Plaisted*

117-118 FOUNDATIONS OF NURSING AND MODERN TRENDS.

Three hours. I, II

The origins, the philosophy and basic concepts of nursing education; present trends of professional nursing, consideration of probable future developments. *Miss Oakley*

120 PRINCIPLES OF PUBLIC HEALTH NURSING.

Three hours. II

Analysis of the fundamental responsibilities of the community nurse and the principles which guide the development of effective community nursing service.

Prerequisite: 116.

Miss Plaisted

121 FUNDAMENTALS OF ORTHOPEDIC NURSING. *Three hours. I or II*

Considers total nursing care for patients with orthopedic conditions. Considers also the application of general principles of posture and body mechanics and the prevention of orthopedic defects in all nursing situations. *Miss Plaisted*

122 FUNCTIONAL ANATOMY.

Two hours. I or II

The study of the microscopic and microscopic structure of the body in relation to their functions. *Miss Ichter*

125 MODERN DEVELOPMENTS IN CARE OF THE SICK. *Two hours. I or II*

Applications of modern science in the care of the sick. Separate units on drug therapy; nutrition; pediatrics, geriatrics; orthopedics; obstetrics. The course is taught in the medical college with observation and demonstration in the Mary Fletcher Hospital.

131 MEASUREMENTS IN NURSING EDUCATION. *Three hours. I or II*

Principles of informal test construction; analysis of standardized tests; survey of common measures of central tendency and variability in field of educational measurements. Application in evaluating and constructing tests in nursing. *Miss Crabbe and others*

134 LEGISLATION AND PRINCIPLES OF ACCREDITATION.

Three hours. I or II

Legislation which controls nursing education and practice in various states; essentials of a sound nurse practice act, the organization and carrying on of legislative programs; principles of accreditation and major accrediting groups. *Miss Oakley*

136 ADMINISTRATION IN SCHOOLS OF NURSING. *Three hours. I or II*

Administrative problems in the hospital school of nursing relative to

nursing service and nursing education; preparation of faculty; organizing and planning curriculum.

Prerequisite: graduation from accredited school of nursing, senior standing, and experience in teaching or supervision. *Miss Crabbe*

138 STUDENT TEACHING.

Three to six hours. I or II

Teaching a unit or course under guidance of a faculty adviser. The science teaching is given in the basic program of the University curriculum, the clinical teaching in the school of nursing of the Mary Fletcher Hospital.

Misses Crabbe, Fox, Ichter and Oakley

The School of Dental Hygiene

The School of Dental Hygiene, established in the Fall of 1949 on authorization and a grant of money by the State Legislature of Vermont of 1949, offers a two-year curriculum leading to a Certificate in Dental Hygiene. The purpose is to meet the ever-increasing need for dental health service. Students who are residents of the state have special tuition rates granted on agreement to stay in the state for two years after graduation for the purpose of furthering the dental health programs of the state.

The curriculum conforms to the requirements for accrediting of schools of Dental Hygiene as adopted by The Council on Dental Education of the American Dental Association on August 1, 1947. On successful completion of this curriculum, the student is eligible to take the examination given by the State Board of Dental Examiners for licensing by that body.

Graduates of this school will be qualified to give oral prophylactic treatment; to chart the mouth, and to carry dental health education into the private dental practice, public institutions, hospitals and industrial clinics. The hygienist may be called upon to perform the following subsidiary functions as the supervising dentist may direct or approve; to X-ray teeth and develop X-ray films; to assist with laboratory work; to make appointments and keep office records; to give demonstrations of the proper method of using a toothbrush and massaging the gums; to lecture on oral hygiene, and to teach oral hygiene and the relation of diet to oral health. The role of the dental hygienist in the achievement of oral health is an extremely important one, and opportunities for well-rewarded service are practically unlimited.

The course of study is designed to give the student a background of knowledge sufficient to enable her to perform intelligently the tasks of her profession. A general scientific background is acquired by courses in chemistry, bacteriology, anatomy, and physiology. Courses specifically relating to dental problems give the student an insight into the field of dentistry and dental health. English composition and public speaking teach the individual to express herself clearly on paper and by word of mouth. The proper approach to the patient is taught by courses in psychology and sociology. Skill and self-confidence are acquired by extensive work during the second year in the dental clinic.

Enrollment is limited to women who are high school graduates and otherwise eligible to enter the freshman class of the University. Prospective applicants are invited to write the Director of Admissions for detailed information concerning such matters as requirements for admission and expenses.

The College of Medicine

REQUIREMENTS FOR ADMISSION

The minimum requirements for admission to the College of Medicine are three years of college work done in an institution listed among the "Approved Colleges of Arts and Sciences," compiled and published by the Council on Medical Education and Hospitals of the American Medical Association. The College of Medicine requires one year each of English, general chemistry, organic chemistry, physics, biology, and a satisfactory course in quantitative chemistry. The College strongly recommends additional courses in English, at least one year of mathematics, and work of such grade in a foreign language that the student will have conversational use and reading knowledge of the language. These should be regarded by the student as minimum basic requirements.

While the minimum requirements must be satisfactorily completed yet additional broad and well-planned courses of study in the fields of history, economics, sociology, psychology, philosophy, music and the arts should be included. This is possible where students carefully plan programs of study early in their academic careers. In this way the student develops a broad general background and at the same time prepares himself for the study of medicine. Each of these is equally important. The well-trained physician should be a well-educated person.

Students must satisfactorily complete all requirements for admission to the College of Medicine in any given year by July 1, preceding the September admission.

The Admissions Committee expects applicants to have completed a program equivalent to that outlined but reserves the privilege, at its discretion, to give favorable consideration to applicants with three years of college work of a different type, provided it includes acceptable credits in the required courses.

Eligibility for admission to the College of Medicine of an applicant, who has fulfilled the entrance requirements as stated, is determined by the Admissions Committee of the College of Medicine on the basis of the following:

1. Personality and general fitness of the applicant for the study and practice of medicine. This is determined by recommendations and especially by personal interview with the Admissions Committee. Dates for these interviews are announced by the Committee.
2. The scholastic record of the applicant in his premedical work, as well as the score earned in the Medical College Admission Test adopted by the Association of American Medical Colleges. No applicant will be considered for admission who has not taken this test.

Because of limited teaching facilities, a maximum of forty-five students is admitted to the entering class. In selection of eligible applicants for admission, the following preferences are, in general, observed by the Admissions Committee.

First preference is given to qualified residents of the State of Vermont. Second preference is given to qualified sons and daughters of alumni. Third preference is given to qualified residents of the northeast New England area outside of the State of Vermont, and to graduates of land-grant colleges in New England.

The State of Vermont by statute requires every resident of the State who enrolls in a curriculum leading to the degree of Doctor of Medicine to sign an agreement to practice medicine in Vermont for the period of one year for each year of enrollment. In lieu of this, the student may refund to the State Treasurer, through the University, the difference between the total tuition paid and the total unit cost to the State of the curriculum pursued.

Individuals selected by the Admissions Committee as eligible for admission, will be required to appear for personal interviews. The Dean's Office will notify such applicants of the appointments for interviews.

Application blanks may be secured from the Dean's Office, College of Medicine, University of Vermont, Burlington, Vermont.

Applications for admission to the class entering in September of any year will close on March 1 preceding the September admission. Applications postmarked up until midnight of the last day of February will be considered. An application fee of ten dollars, payable to the University of Vermont and State Agricultural College, must accompany all applications.

OUTLINE OF THE FOUR-YEAR CURRICULUM

The curriculum of the College of Medicine is designed to train students for the general practice of medicine. Students are encouraged to enter this important field of practice. The courses of instruction are so planned as to afford the best background for the general practice of medicine. This background supplies the best type of training for students who may later elect fields of specialization.

The basic plan of the curriculum centers about clinical teaching. Effort is made to correlate instruction in every year with clinical medicine. By using the clinical approach in laboratory and classroom the student early in his career is brought into contact with the patient.

The student studies first the general structure of the body, its embryological development, the functions of the various organs, the chemical processes taking place in the body and the minute structure of the tissues and organs in health.

Then follows consideration of the changes in gross and microscopic anatomy, the variations in the chemical processes and in the functions of organs and tissues under the influence of disease and how such changes give rise to different symptoms and physical signs. The methods of interpreting such findings in arriving at a diagnosis are considered.

The student then studies the methods of investigating diseases, their causes and prevention, as well as the remedies used in treatment. The various surgical conditions are considered along with the indications for treatment or operation. Reproduction and development are studied, together with the management of normal and abnormal labor.

Instruction is given by lectures, demonstrations, recitations, seminars, library work, practical courses, laboratory work, clinics and clinical teaching, at the bedside and in the Dispensary. For clinical work the class is divided into small sections. Each student, therefore, receives the personal attention of the instructor and is given every opportunity for the full use of assigned material.

In the First Year courses in anatomy, physiology, biochemistry, histology, embryology, neuro-anatomy and bacteriology are given.

In addition, short orientation courses in psychiatry, chemistry, and the use of the library are given in the first semester of the first year. These courses have a twofold purpose. They are primarily designed to maintain continuity between premedical school work and that given in medical school. Secondarily, through these courses the student learns the need for and the proper use of certain important tools in the field of medicine.

The introductory course in psychiatry emphasizes the basic principles of psychology. It discusses the emotional response of the individual to his environment. It helps the student early in his medical career to recognize and establish causal relationship between psychological factors in the patient's life and disease manifestations.

The short course in chemistry focusses the attention of the student on that subject as a science related in a practical manner to the processes of growth and development, health and sickness, life and death. It emphasizes the basic importance of his already acquired knowledge of chemistry and the practical use of it in the qualitative and quantitative aspects of vital phenomena.

The course of instruction in the use of the library and its facilities aims to make the student aware of the library, the important part it plays in all medical work and the necessity to understand its proper use. The course includes lectures on library organization, administration and services. These are given by members of the library department. Practical exercises in the library are given by faculty members to students so they may become familiar with medical literature, its sources and the proper techniques employed in bibliography.

In the Second Year instruction is given in pharmacology, pathology, public health, medicine, surgery, obstetrics, pediatrics and physical diagnosis. Courses in anatomy, physiology and psychiatry are continued. As part of the plan to integrate the student's work in all courses, two-hour correlation conference is held each week during the second semester. This conference is designed to emphasize interdepartmental relationships. Selected cases are presented and students and department members take part in the presentation and discussion.

The work of the Third Year includes continued work in medicine, surgery, obstetrics, pediatrics, and pathology. The third year course in pathology is a continuation of the general course in the second year. Surgical pathology is also included in the work of this year. Radiology and physical medicine are taught throughout the year. The students are also given work in eye, ear, nose and throat, with clinic and ward instruction.

The course in physical diagnosis is continued in the third year. Students are assigned in small sections to the hospital wards, where they take histories and do physical examinations under supervision. This work includes case presentation. The weekly correlation conferences of the second year are continued throughout the third year. In this year, the conference again serves the important role of keeping the basic sciences integrated with clinical teaching. Members of all departments take part in the presentations, and all discussions include material from the laboratory and classroom work of the first two years.

The work of the Fourth Year is given on a twelve-month basis. Upon the completion of the work of the third year, the students begin clinical work in the teaching hospitals in rotation. The services are so arranged that sections of one to five students can be assigned to hospitals for periods of one month, allowing each student to have one month of vacation during the year. Such services include medicine, surgery, obstetrics, pediatrics, surgical specialties, and general services. These services are given at the Mary Fletcher Hospital, the Bishop DeGoesbriand Hospital, the Fanny Allen Hospital, and the Burlington Dispensary with the City Service under the City Physician.

Rotating services of two months in psychiatry and psychosomatic medicine are given at the Vermont State Hospital for Mental Diseases at Waterbury. One month's clinical instruction in tuberculosis and other diseases of the chest is given at the Vermont Sanatorium in Pittsford and at the Trudeau Sanatorium in Trudeau, N. Y. A month's general service in residence is given at the Putnam Memorial (Bennington), Springfield, Rutland, and Brightlook (St. Johnsbury) Hospitals.

During the year students attend autopsies under the instruction of the Department of Pathology. Students are given opportunity to follow these

cases through with study of the gross specimens and microscopic sections.

All fourth-year students attend ward rounds, grand ward rounds, inter-departmental diagnostic conferences and the clinical-pathological conferences. In this manner the student not only receives clinical instruction, but he is constantly kept in touch with the basic work of his first two years in the College of Medicine.

CLINICAL FACILITIES

The normal capacity of the general hospitals in Burlington used by the Medical College is 430 beds. More than 200 additional beds will become available from hospital additions already under construction or planned for the immediate future. At least four hundred of these beds will be used without restriction by the College for clinical teaching. General services at the Putnam Memorial (Bennington), Springfield, Rutland, and Brightlook (St. Johnsbury) Hospitals, increase the number and variety of clinical material.

Other clinical facilities available for student teaching are the outpatient and dispensary services in Burlington, with over 20,000 patients a year; the services of the Vermont State Hospital for Mental Disease at Waterbury, Vermont, with more than 1,250 beds; the Vermont Sanatorium for tuberculosis and the Caverly Preventorium at Pittsford, 75 and 45 beds respectively; the Trudeau Sanatorium at Trudeau, N. Y.; the Children's Home, the Elizabeth Lund Home, and St. Joseph's Orphanage, all in Burlington. The number of children in the three Burlington institutions is more than five hundred. Admissions to the medical, surgical, obstetrical, and specialty services used for teaching purposes approximate 12,000 annually exclusive of the special facilities just described. This amount of clinical material is adequate for the limited enrollment of the two classes doing clinical work.

Departments of Physical Education

PHYSICAL EDUCATION FOR MEN

Assistant Professors Post, Evans, and Gardner; Messrs. Strassburg, Kasap, and Searles

This department aims to train the men students of the University to be healthy, physically and morally fit members of society. It is a required course for all academic freshmen and sophomores. Every new student is given a thorough physical examination. Men who have physical or health defects are given restricted work, with stress on corrective exercises. Follow-up examinations are given as need is indicated.

A chapter of Sigma Delta Psi, honorary national athletic society, is maintained. Any student is eligible for membership provided he can meet the performance standards in both athletics and scholarship.

COURSES OF INSTRUCTION

*1-2 PHYSICAL EDUCATION (Basic).

One hour. I, II

Training in posture, calisthenics, and body-building exercises, the fundamentals and skills of various sports and physical activities, planned to develop and improve skill, coordination, and endurance, to establish regular habits of exercise, and to inculcate intelligent attitudes toward and interest in athletic activities.

Supplemental to this course are the required personal hygiene lectures, giving the student an understanding and appreciation of the factors necessary for health and healthful living.

Two hours weekly required of all academic freshman men.

*11-12 PHYSICAL EDUCATION (Intermediate).

One hour. I, II

This course is based on a seasonal sports program.

Fall—Football, touch football, cross-country, and calisthenics.

Winter—Basketball, volleyball, indoor track, boxing, wrestling, apparatus and tumbling, handball, swimming, skiing, and calisthenics.

Spring—Baseball, volleyball, track, softball, tennis, handball, and calisthenics.

Two hours weekly required of all academic sophomore men.

*The semester hours listed for Basic and Intermediate Physical Education are in addition to the total number of hours required for a degree in a specific curriculum.

21 ADMINISTRATION AND COACHING.

Two hours. I

Football Coaching. The history of the game, its educational implications. Analysis of various systems of play. Instruction in individual and team fundamentals. Strategy, techniques, and generalship. Both theoretical and practical requirements. *Mr. Evans*

Basketball. History and development of the game. Theory and practice. Technique of fundamentals. Individual and team offense and defense. Analysis of various styles and systems of play. *Mr. Evans*

Administration. Philosophical and psychological backgrounds of athletics and physical education in educational procedure. The educational, recreational, and health significance of physical education. Organization of athletics, including interscholastic, intramural, etc.; problems of finance, equipment, officials, facilities, and schedules. *Mr. Post*

Elective for juniors and seniors enrolled in Education Curricula. Elective for seniors in other curricula by special permission. (Offered in alternate years, 1951-52.)

Prerequisite: Physical Education 1-2, and 11-12.

22 HUMAN MECHANICS AND COACHING.

Two hours. II

Athletic Injuries. Understanding of the structure and functions of the body. Diagnosis and treatment of athletic injuries. Problems of hygiene and sanitation. Training and first aid. Practical work in massage, taping, and bandaging. *Mr. Kasap*

Baseball. History and development of the game. Fundamentals and strategy. Individual and team offense and defense tactics. *Mr. Gardner*

Track and Field. History, traditions, and rules of the sport. Class and individual instruction in the fundamentals and techniques of the various events of the track and field program. Care and conditioning of competitors. *Mr. Post*

Elective for juniors and seniors enrolled in Education Curricula. Elective for seniors in other curricula by special permission. (Offered in alternate years, 1951-52.)

Prerequisite: Physical Education 1-2, and 11-12.

INTRAMURAL SPORTS

This program, administered by the Department of Physical Education for Men and directed by Professor Post, enjoys a heavy voluntary participation by the students. Competitions are between classes, fraternities, dormitories, independent groups, and individuals. An Intramural Committee aids the director in determining content and policy, making schedules,

and assigning officials. Contest winners receive suitable awards. The contests include:

Fall—Touch football, tennis, golf.

Winter—Basketball, skiing, wrestling, handball, badminton, basketball free throw, indoor relays, track, bowling, and volleyball.

Spring—Softball, horseshoe pitching, hexathlon.

Interfraternity athletic competition carries points for both winner and runner-up toward the Traynor Trophy, all-year all-round fraternity championship award.

PHYSICAL EDUCATION FOR WOMEN

Associate Professor Cummings; Assistant Professors Euler and Hoffman

At the opening of college a health examination is required of all entering students. On the basis of this examination, the student receives advice concerning the correction of health defects, and direction as to her physical education program. For all students taking the required course, the examination is supplemented by periodic health conferences.

The courses of the Department are given at the Women's Gymnasium in the Southwick Building, in Waterman, and at the Y. M. C. A.

Fall—All sports out of doors. Archery, field hockey, soccer, tennis, horseback riding and golf. The last two carry a small fee. Riding requires written permission from parents.

Winter—fundamental gymnastics, corrective work, dancing (folk, and square dancing, modern dance technique), basketball, volleyball, deck tennis, shuffleboard, badminton, archery, swimming, life saving, bowling, recreational leadership, Girl Scout leadership, skating, and skiing.

Spring—camp craft, softball, archery, sailing, tennis, horseback riding and golf. The last two carry a small fee. Sailing requires written permission from parents.

Elective courses for juniors and seniors are offered in modern dance technique, dance composition, and methods of teaching tennis, field hockey, basketball, badminton, and softball.

Interdormitory and interclass tournaments in many sports, and clubs, in *all* sports, are open to all women students. These are conducted under the direction of the Department instructors and the Women's Athletic Association.

Two years of Physical Education for two periods weekly are required of all college women. This requirement should be completed during the freshman and sophomore years. Students presenting a medical note advising limitation of exercise are given individual programs adapted to their needs. No student is excused.

Supplementary for freshmen is a course in hygiene, one hour per week. Transfers who have not already passed a course in hygiene are required to take this course.

Enrollment in the advanced courses, which are elective, is subject to the approval of the head of the department.

*1-2 FRESHMAN PHYSICAL EDUCATION. *One hour. I, II*

*11-12 SOPHOMORE PHYSICAL EDUCATION. *One hour. I, II*

*41-42 HYGIENE. *One hour. I, II*

* The semester hours listed for Freshman and Sophomore Physical Education and for Hygiene are in addition to the total number of hours required for a degree in a specific curriculum.

The Department of Military Science and Tactics

Colonel J. SAMUEL SAUER, INFANTRY, U. S. ARMY

Professor of Military Science and Tactics

Lieutenant Colonel EDWARD W. CRAWFORD, INFANTRY, U. S. ARMY

Major WILLIAM EVANS-SMITH, INFANTRY, U. S. ARMY

Major GERALD W. GRAY, INFANTRY, U. S. ARMY

Captain JOHN J. BEAULIEU, INFANTRY, U. S. ARMY

Captain HUGH J. O'BRIEN, INFANTRY, U. S. ARMY

Captain ROBERT F. SMILEY, INFANTRY, U. S. ARMY

Assistant Professors of Military Science and Tactics

Master Sergeant HARRY J. BANAN, CAC, U. S. ARMY

Master Sergeant ARTHUR L. CAVANAUGH, QM, U. S. ARMY

Master Sergeant MAURICE A. PRESTON, MC, U. S. ARMY

Master Sergeant JAMES S. SIMS, INFANTRY, U. S. ARMY

Master Sergeant HAROLD G. WOODRUFF, INFANTRY, U. S. ARMY

Sergeant First Class THOMAS F. CLEARY, INFANTRY, U. S. ARMY

Sergeant First Class STEPHEN S. OHLER, INFANTRY, U. S. ARMY

Instructors in Military Science and Tactics

A senior unit ROTC, organized under the provisions of the National Defense Act of 1916 and amendments thereto, aims to prepare students for a commission in the Regular Army and the Organized Reserve Corps of the United States Army in the arm or service selected. A two-year basic and a two-year advanced course are offered.

THE BASIC COURSE

A two-year course is required of all male students except the following:

a. Veterans

(1) A student who has served on active duty in the Armed Forces for six months will be excused from the Freshman Basic Course.

(2) A student who has served on active duty in the Armed Forces for one year will be excused from the entire Basic Course.

b. Former ROTC students

A student who has successfully completed three or more years of the Junior ROTC program at an accredited ROTC institution will be excused from the Freshman Basic Course upon presentation of a military training certificate.

c. Transfers from other institutions

A student who transfers to this institution in his junior or senior year will be excused from the entire Basic Course provided:

- (1) No ROTC training was offered at former institution;
- (2) He has successfully completed the Basic Course if offered at the former institution.

d. Non-citizens

Students may be excused from drill by the University physician for medical reasons.

The class meets at least three periods each week, with a minimum of 96 hours in each academic year. Uniforms, arms, and equipment are furnished the student by the Department of the Army.

1-2 FRESHMAN BASIC.

Two hours. I, II

Military organization; hygiene and first aid; leadership, drill, and exercise of command; maps and aerial photographs; evolution of warfare; marksmanship; military problems of U. S.

3-4 SOPHOMORE BASIC.

Two hours. I, II

Leadership, drill, and exercise of command; introduction to infantry tactics; individual weapons and marksmanship.

Prerequisite: 1-2 or equivalent armed service credit.

THE ADVANCED COURSE

This is a two-year course elective to juniors, and carries three hours credit per semester or twelve hours for the full four semesters. Members of this course are selected by the Professor of Military Science and Tactics and the President of the University. Ex-service personnel may apply in spring of their sophomore year, with the approval of the Dean of the College concerned. Their selection is dependent upon the approval of the officers named above.

Students enrolled in this course will receive a uniform allowance of \$90.00 for the course, and a daily subsistence allowance not to exceed the value of the garrison ration for the period that classes are scheduled. This subsistence allowance is paid monthly and is established each fiscal year. During recent years it has averaged \$27.00 per month. The class meets at least five periods per week with a minimum of one hundred fifty hours per academic year.

Attendance at a summer camp of six weeks duration is mandatory. During such attendance the student is paid at the pay scale of an enlisted man of the Army in the seventh grade. Mileage at five cents per mile is paid to and from camp. Students will attend camp between the junior and senior academic years, but deferment may be made, for cogent reason,

when approved by the Professor of Military Science and Tactics and the Commanding General, First Army.

On successful completion of the course, the student is normally commissioned as a Second Lieutenant, Infantry Branch, Officers Reserve Corps. Outstanding military students are eligible for direct commission in the Regular Army upon graduation. Students who pursue appropriate academic courses may qualify for a commission in a Technical Service, such as Ordnance, Signal Corps, Chemical Corps, Quartermaster Corps, or Corps of Engineers. Students interested in this provision should consult the Professor of Military Science and Tactics.

101-102 ADVANCED COURSE I.

Three hours. I, II

Leadership, drill, and exercise of command; tactics and techniques of infantry, rifle platoon and company; weapons; gunnery; communications.

Prerequisite: 3-4 or equivalent service credit.

103-104 ADVANCED COURSE II.

Three hours. I, II

Command and staff; military teaching methods; psychological warfare; military problems of the United States; leadership, drill, and exercise of command; tactics and technique of infantry, combat intelligence; military law and boards; military supply and evaluation.

Prerequisite: 101-102.

Graduate Study

ORGANIZATION

The Graduate Council and the Director of Graduate Study supervise graduate instruction. Graduate study leading to the Master's degree is offered in the following departments of the College of Agriculture: Agricultural Biochemistry, Agricultural Economics, Agricultural Education, Agronomy, Animal and Dairy Husbandry, Animal Pathology, Botany, Forestry and Horticulture. In the College of Arts and Sciences, the Departments of Classical Languages, English, German, History, Music, Physics, Political Science, Psychology, Romance Languages, and Zoology offer graduate study, as do the Department of Education of the College of Education and Nursing, the Departments of Chemistry, Commerce and Economics, and Mathematics of the College of Technology, the Departments of Anatomy, Bacteriology, Biochemistry, Experimental Medicine, Pathology, Pharmacology and Physiology of the College of Medicine.

ADVANCED DEGREES

The degrees of Master of Arts, Master of Science, Master of Education and Master of Arts in Teaching may be earned by qualified students in regular or summer sessions of the University. Professional degrees in engineering—Civil Engineer, Mechanical Engineer, Electrical Engineer—awarded only to graduates of this University, require evidence of high professional achievement for at least four years, supplemented by an approved thesis.

REGULATIONS

ADMISSION TO GRADUATE STUDY

Applicants for admission must hold a Bachelor's degree from an approved college or university.

New students should apply for admission to the Director of Graduate Study, submitting transcripts of their undergraduate records and, if possible, reports of attainment in the Graduate Record Examination. The latter forms a valuable supplemental means of judging an applicant's preparation for graduate study. The Examination may be taken in any region of the United States. Inquiries may be addressed to the Director of Graduate Study or directly to Educational Testing Service, Princeton, N. J.

Because of the individual nature of most graduate study, the number of candidates selected to specialize in any one department must be limited. Only applicants who desire to work along lines in which the University offers advantages will be accepted.

Candidates must register with the Director at the beginning of each University session spent in residence. The program of graduate work proposed by each student must be approved by the departments in which the work is to be done, by the Director of Graduate Study and, in the case of work pursued in summer sessions, by the Director of the Summer Session.

RESIDENCE

Each candidate for a Master's degree must study in residence at the University of Vermont at least two semesters, or five summer sessions, except that a thesis written under the supervision of a faculty member may be accepted in lieu of one summer of residence. Transfer of credit for courses taken in residence in other institutions can not reduce the residence requirement below the minima specified.

Individual departments may require a longer period of residence than the minima stated above; the departments of Biochemistry, Chemistry, and Physics normally require a minimum of two years. Inadequate preparation in the field in which the student elects to specialize may necessitate the taking of undergraduate courses and the consequent prolongation of the period of residence. Holders of fellowships or assistantships requiring that a substantial portion of time be devoted to teaching or other duties must expect that at least two academic years will be necessary to complete requirements for the degree.

TIME LIMIT

Study for the Master's degree must be completed (1) within a span of three years if pursued during the regular academic year (in special cases credits earned outside this limit may be re-evaluated, and accepted or rejected, by the Executive Committee of the Graduate Council), (2) within a span of seven years if pursued during summer sessions. For students who began graduate study prior to World War II and who subsequently served in the armed forces the time limit may be extended by the length of time of such service in the armed forces. This time limit applies to study at the University of Vermont and to courses taken in other institutions and presented for transfer of credit.

TRANSFER OF CREDIT

Not more than eight semester hours of credit (or the equivalent thereof) for graduate courses taken in other institutions can be transferred for credit toward the Master's degree. Such courses must have been taken in an

accredited college or university offering graduate study and must be acceptable toward graduate degrees in that institution. Credit cannot be transferred for (1) courses which would not, if taken at the University of Vermont, receive graduate credit, (2) courses in which a grade lower than 82 percent (B—) was received, (3) extension courses given by institutions other than those offered in Burlington by the University of Vermont and State Agricultural College, (4) correspondence courses.

EXTENSION COURSES

Not more than eight semester hours of credit toward the Master's degree may be earned by taking extension or adult education courses offered by the University of Vermont in Burlington. Such courses must meet specifications established by the Graduate Council; information as to these specifications may be obtained from the Director of Graduate Study.

APPROVAL OF CANDIDACY FOR DEGREES

The student is considered a candidate for a degree only after the department in which he elects to specialize and the Director of Graduate Study have ascertained that he is qualified to pursue graduate study leading to that degree.

FEES

For information concerning fees, see Index.

GRADES

Each student must maintain an average of 85 (B). A course in which a grade lower than 82 (B—) is received will not be accepted toward an advanced degree. Certain departments require a higher average grade than the 85 specified above, and students are apprised of this before their first enrollment in those departments.

UNIVERSITY TEACHING FELLOWSHIPS

The University offers a number of teaching fellowships with stipends varying from \$400 to \$800, with exemption from tuition charges. These fellowships are provided to encourage students whose undergraduate records and personal qualities give promise of success in research or in the profession of teaching.

The recipient of a fellowship is required to work for the Master's degree and to assist in the work of the department in which he holds the fellowship. Such duties will vary with the size of the stipend, a maximum of half-time service being expected of recipients of the larger amounts.

Applications for fellowships should be addressed to the Director of Graduate Study and should be filed not later than March 15 of the academic year preceding that for which the application is made.

GRADUATE ASSISTANTSHIPS

Assistantships are available in several departments, enabling students to devote half time to graduate study and half time to the work of the department. Information concerning these may be obtained directly from the chairmen of the departments.

EXPERIMENT STATION FELLOWSHIPS

Several fellowships of \$900 to \$1,400, without exemption from the tuition fee, are awarded each year to research assistants in the Experiment Station who are working for the Master's degree. The recipient of a fellowship is expected to devote half-time each year to study for his degree, paying the regular tuition, and half-time to work for the station. All such awards are made on recommendation of the Station Director.

THE GEORGE H. WALKER DAIRY FELLOWSHIP

This fellowship provides a stipend of not less than \$700, with exemption from the tuition fee. It is available to graduate students who during their undergraduate course have studied "agriculture, chemistry, and bacteriology" and who desire to study the problems relating to the production of a sanitary milk supply on comparatively small plants and farms. The endowment of ten thousand dollars is sufficient to provide a fellowship every third year.

SCHOLARSHIP AID

Graduate students may receive scholarship aid on the same basis as undergraduate students. Details are given under "Student Aid," for which see Index.

REQUIREMENTS FOR DEGREES

AMOUNT OF WORK REQUIRED

A total of thirty semester hour credits is required for the Master's degree. Credit for the preparation of a thesis under the direction of the particular department, when required, is to be considered as part of the program.

MASTER OF ARTS AND MASTER OF SCIENCE

FIELD OF SPECIALIZATION. In judging the attainments of candidates, the Graduate Council places greatest emphasis upon ability to do original

research in the chosen field of specialization. Hence, the number of undergraduate and graduate courses required will vary with the preparation and needs of the individual student. Each department will require of its students such courses and assigned readings as may be deemed necessary to their graduate education.

Each student will undertake a problem of original research under the direction of a member of the department in which he is specializing. At the conclusion of the investigation the student must present a thesis embodying the results obtained and demonstrating his capacity for independent research. One copy of the thesis must be bound for deposit in the University library; some departments require that a second copy be bound for deposit with the department.

Certain departments have established requirements in addition to those stated here; students seeking to specialize in these departments will be furnished information concerning such requirements.

FIELD OF RELATED STUDY. Normally the graduate program will include advanced courses taken in at least two departments. In some cases, however, it may seem wise to permit a student to confine his work to one department. This may be done, providing the program of the student includes graduate courses or supervised study with at least three faculty members qualified to offer graduate instruction.

MASTER OF EDUCATION

The degree Master of Education is offered to students who wish to specialize in Education and whose undergraduate records indicate capacity for graduate study.

The Department of Education will plan for each student a systematic course of study, supervised by the head of the Department and subject to the approval of the Director of Graduate Study. At least thirty semester hours of approved graduate work must be taken and passed with distinction. Not less than six of the thirty semester hours must be devoted to a field of related study in departments other than the Department of Education. The course entitled, "The Intellectual Background of Modern Life" is recommended for all candidates for this degree.

The Department of Education will assign each candidate a course of readings, examination on which will form part of the written examination in the field of specialization.

If a student's preparation in Psychology or Education is insufficient, additional undergraduate courses in these fields may be required.

A thesis may be accepted in lieu of six semester hours of graduate

courses. The thesis must be developed under the direction of the Department of Education and must be approved by the Director of Graduate Study.

MASTER OF ARTS IN TEACHING

A student working for this degree may specialize in a single department offering courses for graduate credit or in any acceptable combination of such departments. Typical inter-departmental fields of specialization are: English and Speech; Natural Sciences; Physical Sciences; Modern Languages, or Social Sciences. Students who enroll for this degree should have completed an undergraduate major in the field of specialization and be acceptable to the Department or Departments concerned.

A minimum of thirty semester hours of graduate work is required, of which not less than six semester hours shall be in Education. In his undergraduate and graduate work, a student must complete eighteen semester hours in Education. The following courses or their equivalent must be included in the program: Educational Psychology or Principles of Education, History of Education, Secondary Education, General Methods or Procedures, Student Teaching, and Methods of Teaching a Special Subject.

The examination requirements are the same as for the other Masters' degrees, with the oral examination testing the competency of the candidate as a teacher in the field of specialization.

PROFESSIONAL DEGREES

The advanced degrees of Civil Engineer, Mechanical Engineer, and Electrical Engineer may be conferred upon graduates in the Engineering curricula of the University of Vermont. At least four years must have elapsed since the candidate's graduation. For at least three years the candidate must have held positions of responsibility in his profession and have shown ability to design and execute important engineering work.

At least six months before the end of the year in which the degree is sought the candidate must present to the Director of Graduate Study a statement of his technical training and experience, together with the topic upon which he proposes to submit a thesis. The thesis must embody the results of original investigation upon some technical subject. The professional record and thesis topic must be approved by the College of Technology and by the Executive Committee of the Graduate Council.

The thesis must be presented to the Director of Graduate Study not later than three weeks prior to commencement. The thesis must be approved by the College of Technology and by the Executive Committee of the Graduate Council.

MASTERS' EXAMINATIONS

The examinations culminating the program of graduate study are as follows: (1) a written examination (two-hour minimum) in the field of specialization; (2) a written examination (two-hour minimum) in the field of related study; (3) an oral examination on the thesis, or, for candidates for the Master of Education degree and the Master of Arts in Teaching degree, in the field of Education or subject matter field in which the candidate wishes to demonstrate special competence.

Success in the written examinations is prerequisite to the taking of the oral examination. The written examinations must precede the oral examination by at least two weeks. It is recommended that the interval be longer, and that students working for the degree in summer sessions plan their work so that the written examinations can be taken during the summer prior to that in which the oral examination is to be taken.

The University Extension

The aim of the University Extension work is to broaden the horizon of those who have not attended college and afford an opportunity for those who have attended college to keep in touch with academic thought along their favorite lines, or to gain some information about subjects which they have not studied in college.

The Extension work of the University includes the following: the Agricultural Extension Service (see Index), the Summer Session, Adult Education, Conferences, the Robert Hull Fleming Museum, and the Government Clearing House.

THE SUMMER SESSION

A Summer Session is maintained each year for a minimum period of six weeks. Subjects offered include art, botany, chemistry, commercial subjects, dramatic art, economics, education, English, French, geography, German, history, home economics, industrial arts, Latin, mathematics, music (instrumental and vocal), philosophy, physical education, physics, political science, psychology, radio broadcasting, Russian, Spanish, speech, and zoology. The Summer Session is intended to meet the needs of various groups of students:

1. Persons with adequate preparation who desire to take courses leading to a Bachelor's degree.
2. Persons who have completed a four-year college course and who wish to take advanced work for credit toward the Master's degree.
3. Principals and superintendents of schools who desire to take fundamental or specialized courses in the fields of educational administration and supervision.
4. Teachers in elementary or secondary schools who desire to earn credit toward State teachers' certificates of higher grade or who desire to broaden their knowledge of special subjects.
5. Persons who desire courses at the college level for self-improvement.

There is an enrollment fee of \$5.00 and a tuition charge of \$12.50 per semester hour.

A special bulletin giving a full description of courses will be sent upon application to the Director of the Summer Session.

ADULT EDUCATION

The University maintains an Adult Education program including both campus evening classes and courses by certain faculty members offered in Vermont communities where sufficient enrollment can be secured.

Under Plan I, lectures and/or discussions are provided in series of variable length on a non-academic basis at cost, with fees pro rata. A variety of subjects are available for groups wishing to enroll for enjoyment, cultural enrichment, or vocational advancement. No academic credit or teacher certification credit is available under Plan I.

Plan II provides for courses carrying undergraduate credit. Under this plan Adult Education classes usually meet in two-hour session once a week for fifteen weeks. Tuition is charged at the rate of thirty dollars for the two semester hours if taken for credit, or twenty dollars if credit is not desired.

A limited number of Adult Education credits may be accepted toward a degree, or toward additional teacher certification by the State Department of Education. Any person desiring to take an Adult Education course for credit toward a degree should secure the approval of the appropriate dean.

The following courses have been given recently in this program:

Arts and Crafts	Personality Development and Mental Hygiene
C.P.A. Problems	Principles and Practices of Guidance Services
Comparative Nursing	Principles of Marketing
Current Economics Problems	Public Speaking
Drawing and Painting	Retail Accounting
Educational Measurements and Statistics	Retail Merchandising
Electrical Engineering	Salesmanship
Insurance	Short Story and Article Writing
Intellectual Backgrounds of Modern Life	Training of the Speaking Voice
Journalism	Vermont History and Folklore
Music Appreciation	Vocational and Educational Testing
Occupational and Education Information	

Requests for further information or for the scheduling of a course under either Plan I or Plan II should be addressed to the Director of Adult Education, Waterman Building.

THE GOVERNMENT CLEARING HOUSE

The Government Clearing House endeavors to promote a practical approach to the study of government by students in the University and also to provide information relative to problems of government, upon request, primarily to town and city officials in the state, but also to officials of other government units and to private citizens.

The Clearing House cooperates with such organizations as the Vermont State Chamber of Commerce and the New England Council in sponsoring such activities as the annual "Town Report Contest." Through the Clearing House, the University cooperates with the Governor, other state officers, including those in the Vermont Development Commission, and the Vermont State Chamber of Commerce in sponsoring the annual Town Officers' Educational Conferences.

A Public Affairs Library is maintained as a memorial to the late James P. Taylor whose efforts to expand citizen interest in good government are well known throughout the State of Vermont.

THE ROBERT HULL FLEMING MUSEUM

The Museum offers a number of extension projects for clubs, libraries, and schools; makes exhibits available to city and rural schools; carries on the Vermont Film Library with 150 member schools; and offers on Saturday mornings entertainment, and educational moving pictures to children. The Fleming Museum Association offers motion pictures, lectures, pre-views and teas to its members and arranges special art exhibits which are free to the public.

CONFERENCES

During the course of the year, many conferences are held on the campus. Every week one or more groups closely associated with some phase of the University's activities meet to discuss problems and to exchange ideas. Groups interested in arranging such conferences should write to the Director of Public Relations for details.

It has become the policy of the University to hold annually in March an educational conference with the schools of the State. The project is a part of the University's contribution to the effort which is being made by the various educational forces of the State to improve our institutions of all grades, from the primary school to the college and the University. In selecting a topic for the conference an effort is made to look to the future and anticipate the problems which Vermont must consider. The aim is to bring to the teachers of the State, year by year, expert reports and opinions relating to some of our many serious educational problems. This conference is held in connection with the convention of the Champlain Valley Teachers' Association.

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1946-52

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1948 ELIAS LYMAN, M.A.
North Ferrisburg, Vermont

1948-54

1950 JOHN HAYWARD PATRICK, M.B.A.
Burlington, Vermont

1950 FREDERICK WAYNE SHEPARDSON, B.S.
Burlington, Vermont

1950 FRED BONAR WRIGHT, B.S.
Pelham, New York

1950-56

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1941	CLEON ARTHUR PERKINS, B.S. Rutland, Vermont	
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1949	LAURENS WILLIAMS, B.A. Woodstock, Vermont	
1949	MRS. HAZEL McLEOD WILLS, B.A. Bennington, Vermont	
1951	ROBERT WALLACE H. DAVIS, B.S. Newport, Vermont	} 1951-57 (As of February 15, 1951)
1951	LAWRENCE FINDLEY KILLICK Burlington, Vermont	
1951	AMOS RALPH MOODY Whitingham, Vermont	

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LOIS BEMIS, B.S.

Assistant Director, Waterman Cafeteria

ISABEL UDALL

Dietitian, Robinson Hall

HELEN I. BROWN, M.S.

Food Supervisor, Waterman Cafeteria

CAROLYN W. WIDEGREN, A.B.

Catering Supervision

REBA MERCER

Supervisor, Soda Fountain

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CHARLES PERKINS MOAT, B.S.	<i>Assistant Professor Emeritus of Public Health</i>
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GEORGE PLUMER BURNS, Ph.D.	<i>Professor Emeritus of Botany</i>
THOMAS STEPHEN BROWN, M.D.	<i>Professor Emeritus of Anatomy</i>
GEORGE GORHAM GROAT, Ph.D.	<i>Professor Emeritus of Economics</i>
ARTHUR DEXTER BUTTERFIELD, D. ENG.	<i>Professor Emeritus of Mathematics and Geodesy</i>
LYMAN ALLEN, M.D.	<i>Professor Emeritus of Surgery</i>
GEORGE MILLAR SABIN, M.D.	<i>Professor Emeritus of Clinical Surgery</i>
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ELIJAH SWIFT, Ph.D.	<i>Professor Emeritus of Mathematics</i>
HOWARD BOWMAN ELLENBERGER, Ph.D.	<i>Professor Emeritus of Animal and Dairy Husbandry</i>

The Faculty

Dates after names represent the year of original appointment.

- JOHN ABAJIAN, JR., M.D. (1940-42; 1945) *Professor of Anesthesia*
 JOHN EDWARD AKEY, M.A. (1950) *Instructor in English*
 NELLE ALEXANDER ADAMS (Mrs. W. R.), A.M. (1926) *Assistant Professor of Education*
 THURSTON MADISON ADAMS, Ph.D. (1943) *Professor of Agricultural Economics*
 WILLIAM RITCHIE ADAMS, Ph.D. (1926) *Professor of Forestry*
 ROBERT BASCOM AIKEN, M.D. (1941) *Associate Professor of Preventive Medicine*
 JOHN WATSON ALDRIDGE, A.B. (1948) *Assistant Professor of English*
 SINCLAIR TOUSEY ALLEN, JR., M.D. (1948) *Assistant Professor of Medicine*
 ELLSWORTH LYMAN AMIDON, M.D. (1933) *Professor of Medicine*
 RICHARD WALKER AMIDON, M.D. (1949) *Instructor in Medicine*
 HEINZ LUDWIG ANSBACHER, Ph.D. (1946) *Associate Professor of Psychology*
 HENRY VERNON ATHERTON, M.S. (1949) *Instructor in Animal and Dairy Husbandry*
 ROBERT SHILLING BABCOCK, Ph.D. (1946) *Assistant Professor of Political Science*
 FLORENCE EMILY BAILEY, M.S. (1923) *Associate Professor of Home Economics*
 LEON HENRY BAKER, Sgt., U. S. Army (1948) *Instructor in Military Science and Tactics*
 HENRY JUNIOR BANAN, 1st Sgt., U. S. ARMY (1946) *Instructor in Military Science and Tactics*
 BETTY BANDEL, M.A. (1947) *Assistant Professor of English*
 RALPH JOHN BANNISTER (1950) *Instructor in X-Ray Technique*
 WILLIAM BARANOFF, M.A. (1950) *Instructor in Mathematics*
 JOHN FRYE BELL, M.D. (1947) *Associate Professor of Orthopedic Surgery*
 HOWARD GORDON BENNETT, A.M. (1925) *Professor of Music*
 LOUIS BENSON, M.D. (1936) *Associate Professor of Preventive Medicine*
 HELEN ELIZABETH BERESFORD, M.A. (1947) *Professor of Home Economics*
 RONALD ROSSI BIELLI, M.A. (1948) *Instructor in Mathematics*
 (On leave, 1950-51)
 MRS. JOYCE WOODRUFF BISTER, B.S. (Feb. 1950) *Instructor in Economics*
 JOHN HARDESTY BLAND, M.D. (1949) *Instructor in Medicine*
 CHARLES HUGO BLASBERG, M.S. (1944) *Associate Professor of Horticulture*
 SAMUEL NATHANIEL BOGORAD, Ph.D. (1946) *Assistant Professor of English*
 WESSON DUDLEY BOLTON, D.V.M. (1950) *Assistant Professor of Animal Pathology*
 CHARLES FARRINGTON BOND, M.A. (1950) *Assistant Professor of Zoology*

- DAVID MARSH BOSWORTH, M.D. (1922-25; 1942) *Consultant in Orthopedic Surgery*
- ALEX BRADFIELD, M.S. (1945) *Associate Professor of Dairy Manufacturing*
- CHARLES ERNEST BRAUN, Ph.D. (1928) *Pomeroy Professor of Chemistry*
- LELAND LAWRENCE BRIGGS, M.B.A. (1927) *Associate Professor of Economics*
- KATHLEEN KAVANAUGH BRITTAIN, M.A. (1950) *Instructor in English*
- CONSTANCE LORRAINE BROWN, M.S. (1928) *Assistant Professor of Chemistry*
- GLENN HALSTEAD BROWN, M.S. (1950) *Assistant Professor of Chemistry*
- HELEN IONE BROWN, M.A. (1950) *Instructor in Home Economics*
- MARION HUNTINGTON BROWN, M.S. (1942) *Instructor in Home Economics*
- WILLIAM EUSTIS BROWN, Ph.B., M.P.H., M.D. *Professor of Preventive Medicine*
- JAMES ATKINS BULLARD, Ph.D. (1928) *Williams Professor of Mechanics and Mathematics*
- LAWRENCE WHITNEY BURGESS, M.S. (1943-44; 1947) *Instructor in Physics*
- ROY VEDDER BUTTLES, M.D. (1950) *Instructor in Pathology*
- CHARLES LYMAN CALAHAN, M.S. (1948) *Instructor in Horticulture*
- THOMAS WRIGHT MOIR CAMERON, Ph.D., D.Sc. (1942) *Visiting Professor of Tropical Medicine*
- FRED DONALD CARPENTER, Ph.D. (1918) *Professor of the German Language and Literature*
- HOWARD JULIAN CARPENTER, B.S. (1947) *Instructor in Mechanical Engineering*
- DANIEL BERNARD CARROLL, Ph.D. (1924) *McCullough Professor of Political Science*
- HENRY HASLEHURST CARSE, M.B.A. (1947-49; 1950) *Assistant Professor of Economics*
- ROBERT McCRILLIS CARTER, JR., Ph.D. (1944) *Associate Professor of Agricultural Economics*
- ARTHUR L. CAVANAUGH, M/Sgt. U.S. Army (1949) *Instructor in Military Science and Tactics*
- ALFRED HAYES CHAMBERS, Ph.D. (1948) *Associate Professor of Physiology*
- JAMES PATRICK CHAPLIN, Ph.D. (1947) *Associate Professor of Psychology*
- RUPERT ADDISON CHITTICK, M.D. (1944) *Professor of Psychiatry*
- PAUL DENNISON CLARK, M.D. (1930) *Associate Professor of Pediatrics*
- THOMAS F. CLEARY, SFC, U. S. Army (1950) *Instructor in Military Science and Tactics*
- JULIUS GEORGE COHEN, M.D. (1950) *Instructor in Psychiatry*
- FRANCIS PEABODY COLBURN, Ph.B. (1942) *Assistant Professor of Art*
- RICHARD KISTLER CONKLIN, D.D.S. (1950) *Instructor in Dental Hygiene*
- ROGER GREENWOOD COOLEY, M.A. (1949) *Instructor in History*
- DOROTHY BLACK CORBIN, M.D. (1940-42; 1950) *Instructor in Pediatrics*
- STUART STARNES CORBIN, M.D. (1940) *Associate Professor of Pediatrics*
- ROY EDWARD CORLEY, M.D. (1937) *Associate Professor of Pediatrics*

- FAYE CRABBE, A.M. (1943) *Associate Professor of Nursing*
- ALBERT JAMES CRANDALL, M.D. (1939) *Instructor in Clinical Surgery*
- EDWARD W. CRAWFORD, Major, U. S. Army (1950)
Assistant Professor of Military Science and Tactics
- GEORGE CHAPMAN CROOKS, Ph.D. (1930) *Associate Professor of Chemistry*
(On leave, 1950-51)
- ELEANOR STENSON CUMMINGS, A.B. (1920)
Associate Professor of Physical Education for Women
- JOHN CHARLES CUNNINGHAM, M.D. (1946) *Shipman Professor of Ophthalmology*
- MALCOLM DANIEL DAGGETT, Ph.D. (1945) *Professor of Romance Languages*
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- JOHN BELLOW'S DEFOREST, Ph.D. (1921) *Professor of Romance Languages*
- GINO ALDO DENTE, M.D. (1950) *Instructor in Anesthesiology*
- JOHN FRANK DETLEFF, M.A. (1950) *Instructor in Mathematics*
- DOLORES DIRUBBO, A.M. (1948) *Instructor in Romance Languages*
- ROLAND FREEMAN DOANE, D.U. (1925)
Associate Professor of Romance Languages
- ELEAZER JOHNSON DOLE, Ph.D. (1921) *Associate Professor of Botany*
- CHARLES GEORGE DOLL, A.M. (1927)
Associate Professor of Geology and Mineralogy
- RAYMOND MADIFORD PEARDON DONAGHY, M.D. (1946)
Associate Professor of Neurosurgery
- JAMES ANTHONY DONAHUE, JR., M.C.S. (1949)
Assistant Professor of Economics
- BENNETT COOPER DOUGLASS, Ph.D. (1921) *Professor of Education*
- NICHOLAS BERNARD DREYER, M.R.C.S., L.R.C.P. (1945)
Professor of Pharmacology
- HOWARD DUCHACEK, M.S.A.E. (1949)
Assistant Professor of Mechanical Engineering
- JAMES KELMAN DUNCAN, B.S. (1948) *Instructor in Mathematics*
- FRED WILLIAMS DUNIhue, Ph.D. (1936) *Professor of Histology and Embryology*
- WINFIELD BOOTH DURRELL, M.S. (1949) *Assistant Professor of Animal Pathology*
- GEORGE DYKHUIZEN, Ph.D. (1926) *Professor of Philosophy*
- EUGENE KENNETH EAKIN, Ph.D. (1950) *Associate Professor of Education*
- OLIVER NEWELL EASTMAN, M.D. (1911) *Professor of Gynecology*
- OLIVER ROLFE EASTMAN, M.D. (1948)
Assistant Professor of Obstetrics and Gynecology
- DONALD M. ELDRED, M.A. (1949) *Instructor in Clinical Psychology*
- KARL WAYNE ERWIN, M.D. (1949) *Instructor in Pharmacology*
- EDMOND LEON ESCOLAS, M.A. (1947-49; 1950) *Assistant Professor of Economics*
- LOUIS WILLIAM ESPOSITO, M.D. (1944) *Instructor in Urology*

- JOHN SEELEY ESTABROOK, M.D. (1940) *Instructor in Clinical Pediatrics*
- JEANNE MARGARET EULER, B.S. (1943)
Assistant Professor of Physical Education for Women
- JOHN CLIFFORD EVANS, B.S. (1937)
Assistant Professor of Physical Education for Men
- PAUL DEMUND EVANS, Ph.D. (1930) *Professor of History*
- WILLIAM EVANS-SMITH, Major, U. S. Army, B.S. (1948)
Assistant Professor of Military Science and Tactics
- CLIFTON DOW FARRAND, B.S. (1949) *Instructor in Economics*
- WILLIAM THOMPSON FISHBACK, A.M. (1950) *Instructor in Mathematics*
- ROBERT FITZSIMMONS, M.S. (1949) *Instructor in Animal and Dairy Husbandry*
- WINTHROP MAILLOT FLAGG, M.D. (1935) *Professor of Urology*
- ARTHUR HOWARD FLOWER, JR., M.D. (1950) *Instructor in Dermatology*
- CHRISTINE LOIS FLURRY, B.A. (1949) *Instructor in Psychology*
- MURRAY WILBUR FOOTE, B.S. (1947) *Instructor in Agricultural Biochemistry*
- JOHN LOUIS PHILIPPE FOREST, M.D. (1942) *Instructor in Clinical Psychiatry*
- ERALD FAIRBANKS FOSTER, M.D. (1931) *Instructor in Public Health*
- GRACE ROWAN FOX, B.S. (1948) *Instructor in Nursing*
- PERCY AUSTIN FRALEIGH, Ph.D. (1927) *Flint Professor of Mathematics*
- ALDO GINO FRANCESCHI, M.D. (1946) *Instructor in Urology*
- LYDIA AUGUSTA FRANK, M.A. (1949) *Instructor in Speech*
- PAUL KENDRICK FRENCH, M.D. (1924) *Professor of Clinical Medicine*
- FRED WILLIAM GALLAGHER, Ph.D. (1944)
Professor of Bacteriology and Clinical Pathology
- WILLIAM LAWRENCE GARDNER, B.S. (1929)
Assistant Professor of Physical Education for Men
- ALEXANDER GERSHOY, Ph.D. (1923) *Professor of Botany*
- ARTHUR GLADSTONE, M.D. (1936) *Associate Professor of Clinical Surgery*
- RUTH LORETTA GODFREY, M.S. (1945) *Associate Professor of Home Economics*
- GERALD WOODROW GRAY, Major, U. S. Army; Ph.B. (1950)
Assistant Professor of Military Science and Tactics
- DONALD CROWTHER GREGG, Ph.D. (1946) *Associate Professor of Chemistry*
- EDWIN CHARLES GREIF, M.S. (1950) *Assistant Professor of Economics*
- ROBERT KENNETH GRIFFIN, B.S. (1949) *Instructor in Economics*
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- THEODORE HENRY HARWOOD, M.D. (1938) *Associate Professor of Medicine*
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Assistant Professor of Political Science
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- OLIVER JOHN HAYLES, B.A. (1948) *Instructor in Electrical Engineering*
 EARL MURDOCK HEAD, D.M.D. (1950) *Instructor in Dental Hygiene*
 PAUL LEHMANN HEININGER, D.D.S. (1949) *Instructor in Dental Hygiene*
 DONALD CEDRIC HENDERSON, M.S. (1944) *Associate Professor of Poultry Husbandry*
 CHARLES FENNO HOFFMAN, JR., A.M. (1950) *Instructor in English*
 ETHEL PAULINE HOFFMAN, M.S. (1942) *Assistant Professor of Physical Education for Women*
 ARTHUR RUSH HOGAN, M.D. (1939) *Assistant Professor of Clinical Surgery*
 CHARLES WILLIAM HOILMAN, M.S. (1949) *Associate Professor in Electrical Engineering*
 RALPH MAYNARD HOLMES, Ph.D. (1925) *Professor of Physics*
 FREDERICK SHERMAN HOPKINS, JR., M.F. (1950) *Assistant Professor of Forestry*
 DAVID BRADFORD HOPKINSON, M.S. (1946) *Assistant Professor of Mechanical Engineering*
 (On leave, 1950-51)
 RICHARD JOHN HOPP, M.S. (1947) *Assistant Professor of Horticulture*
 GEORGE RICHARD HOPWOOD, B. Ed. (1947) *Instructor in English*
 ROBERT BRUCE HUBER, Ph.D. (1946) *Professor of Speech*
 JOHN CHARLES HUDEN, Ph.D. (1950) *Professor of Education*
 MURIEL JOY HUGHES, Ph.D. (1942-44; 1945) *Associate Professor of English*
 EDWARD PUTNAM HUME, M.S. (1949) *Assistant Professor of Horticulture*
 RONALD HUGH HUMPHREY, M.A. (1946) *Instructor in Dramatics*
 JEAN ELOISE ICHTER, B.S. (1948) *Instructor in Nursing*
 DAVID EMANUEL JOHNSON, JR., B.S. (1947) *Instructor in Civil Engineering*
 FLOYD ROBERT JOHNSON, B.S. (1947) *Instructor in Mechanical Engineering*
 STUART LYNDE JOHNSTON, Ph.D. (1940-44; 1946) *Associate Professor of Romance Languages*
 DONALD BOYES JOHNSTONE, Ph.D. (1948) *Assistant Professor of Microbiology*
 BENJAMIN ANGUS JONES, M.S. (1950) *Assistant Professor of Agricultural Engineering*
 CHARLES WILLIAM JONES, M.D. (1950) *Instructor in Pathology*
 HOVEY JORDAN, M.S., A.M. (1913) *Professor of Histology and Embryology*
 HARRY HELMUTH KAHN, B.A. (1948) *Instructor in German*
 MIKE KASAP, B.S. (1948) *Instructor in Physical Education for Men*
 JAY EDGAR KELLER, M.D. (1950) *Instructor in Clinical Surgery*
 FRANCIS WILLIAM KELLY, M.D. (1947) *Instructor in Psychiatry*
 JOSEPH BURNHAM KELLY, M.S. (1946) *Assistant Professor of Agronomy*
 MORRIS WELLESLEY KENFIELD, B.S. (1946) *Instructor in Mechanical Engineering*
 JOHN HARVEY KENT, Ph.D. (1950) *Professor of Classical Languages and Literature*
 GEORGE VINCENT KIDDER, Ph.D. (1922) *Roberts Professor of Classical Languages and Literature*

- WILLIAM SCRIBNER KIMBALL, Ph.D. (1949) *Associate Professor of Mathematics*
- FLORANCE BEESON KING, Ph.D. (1940) *Professor of Home Economics*
- DAVID LESLIE KINSEY, M.A. (1950) *Assistant Professor of Music*
- LEWIS EDWARD KNOLLMAYER, Ph.D. (1947) *Associate Professor of Economics*
- ESTHER LUCILE KNOWLES, M.S. (1945) *Assistant Professor of Home Economics*
- FRED CARL KOERNER, JR., M.C.E. (1948) *Assistant Professor of Civil Engineering*
- EDWARD KSIAZEK, B.S. (1948) *Instructor in Electrical Engineering*
- ELIZABETH KUNDERT, M.D. (1942) *Assistant Professor of Psychiatry*
- MERTON PHILIP LAMDEN, Ph.D. (1947) *Assistant Professor of Biochemistry*
- JULES ALPHONSE LARRIVEE, Ph.D. (1946-48; 1949) *Associate Professor of Mathematics*
- PETER PAUL LAWLOR, M.D. (1939) *Assistant Professor of Otolaryngology and Rhinology*
- PAUL GREEN LEFEVRE, Ph.D. (1945) *Associate Professor of Physiology and Biophysics*
- EUGENE LEPESCHKIN, M.D. (1947) *Assistant Professor of Experimental Medicine*
- IHOR ALEXANDER LEVITSKY, Ph.D. (1947) *Assistant Professor of Philosophy*
- JULIAN IRA LINDSAY, A.M. (1910) *Professor of English*
- GEORGE THOMAS LITTLE, Ph.D. (1950) *Assistant Professor of Political Science*
- JOHN ERNEST LITTLE, Ph.D. (1945) *Associate Professor of Biochemistry (Agr.)*
- JOHN HUTCHISON LOCHHEAD, Ph.D. (1942) *Associate Professor of Zoology*
- PHILIPP HANS LOHMAN, Ph.D. (1945) *Converse Professor of Commerce and Economics*
- ARTHUR OWEN LONG, Ph.D. (1949) *Assistant Professor of Chemistry*
- LITTLETON LONG, Ph.D. (1949) *Instructor in English*
- CARL LUCARINI, A.M. (1928) *Assistant Professor of Chemistry*
- MARJORIE ELLINWOOD LUCE, B.S. (1946) *Assistant Professor of Agricultural Education*
- ELEANOR MERRIFIELD LUSE, Ph.D. (1947) *Associate Professor of Speech*
- JOHN FREDERICK LYNCH, M.D. (1939) *Instructor in Clinical Surgery*
- HERBERT CHRISTIAN McARTHUR, B.A. (1950) *Instructor in English*
- ROBERT JAMES McKAY, JR., M.D. (Jan. 1950) *Assistant Professor of Pediatrics*
- EDD RUTHVEN McKEE, M.S., E.E. (1934) *Professor of Electrical Engineering*
- KARL CORNELIUS McMAHON, M.D. (1925) *Assistant Professor of Otolaryngology and Rhinology*
- EDWARD DOUGLAS McSWEENEY, M.D. (1923) *Assistant Professor of Gynecology*
- KATHERINE ELLA McSWEENEY, M.D. (1939) *Instructor in Clinical Medicine*
- ALBERT GEORGE MACKAY, M.D. (1933) *Professor of Surgery*
- JOHN VAN SICKLEN MAECK, M.D. (1948) *Assistant Professor of Obstetrics and Gynecology*
- JAMES PATRICK MAHONEY, M.D. (1940) *Instructor in Clinical Medicine*

- J. EDWARD MARCEAU, D.D.S. (1949) *Assistant Professor of Dental Hygiene*
 GILBERT ADAMS MARSHALL, B.S. (1947) *Instructor in Mechanical Engineering*
 FREDERIC CARVER MARSTON, JR., Ph.D. (1948) *Assistant Professor of English*
 MIRIAM NATILEE MARSTON, A.M. (1926) *Assistant Professor of Music*
 JAMES WALLACE MARVIN, Ph.D. (1939) *Professor of Botany*
 INA MAXSON, M.S. (1947) *Assistant Professor of Medical Technology*
 MRS. SALLY BERRY MAYBURY, M.Ed. (1944) *Assistant Professor of Economics*
 ROBERT LELAND MAYNARD, M.D. (1944) *Assistant Professor of Orthopedic Surgery*
 GORDON MONTGOMERY MEADE, M.D. (1950) *Assistant Professor of Medicine*
 HAROLD EDWARD MEDIVETSKY, M.D. (1937) *Instructor in Clinical Medicine*
 JOHN TRUMBULL METCALF, Ph.D. (1921) *Professor of Psychology*
 META BETZ METZE (MRS. R. W.), B.S. (1950) *Instructor in Home Economics*
 REGINALD VENN MILBANK, B.S. (1946-48; 1949) *Associate Professor of Civil Engineering*
 DONALD BARKER MILLER, M.D. (Jan., 1951) *Instructor in Chest Surgery*
 HOWARD GUY MILLINGTON, C.E. (1920) *Assistant Professor of Mathematics*
 HENRY LEE MILLS, D.V.M. (1943) *Instructor in Public Health*
 MRS. ISABEL CLARK MILLS, A.M. (1932) *Instructor in Art*
 ROGER SHERMAN MITCHELL, M.D. (1950) *Assistant Professor of Medicine*
 PAUL AMOS MOODY, Ph.D. (1927) *Howard Professor of Natural History and Zoology*
 RAYMOND FRED MOSHER, S.M. (1948) *Associate Professor of Electrical Engineering*
 EDYTHE MARIE NAGLER, M.A. (1949) *Instructor in Zoology*
 CHESTER ALBERT NEWHALL, M.D. (1929) *Thayer Professor of Anatomy*
 JOHN ALVIN NEWLANDER, Ph.D. (1919) *Professor of Animal and Dairy Husbandry*
 GEORGE HUBERT NICHOLSON, A.M. (1923) *Assistant Professor of Mathematics*
 ALEX BENJAMIN NOVIKOFF, Ph.D. (1948) *Associate Professor of Experimental Pathology and Biochemistry*
 CATHERINE FRANCES NULTY, Ed.M. (1920) *Associate Professor of Economics (Secretarial)*
 ANDREW EDGERTON NUQUIST, Ph.D. (1938) *Associate Professor of Political Science*
 LENA RAUB OAKLEY, M.A. (1947) *Assistant Professor of Nursing*
 HUGH JOHN O'BRIEN, JR., Captain, U. S. Army, B.S. (1950) *Instructor in Military Science and Tactics*
 CHARLES HENRY OKEY, Ph.D. (1950) *Assistant Professor of Bacteriology*
 IPPOCRATES PAPPOUTSAKIS, Mus.B. (1940) *Associate Professor of Music*
 SISTER CORONA PARENTEAU, R.N. (1945) *Laboratory Instructor in Medical Technology*

- VICTOR H. PAQUET, B.S. (1949) *Assistant Professor of Mechanical Engineering*
 HERBERT DEAN PEARL, A.M. (1941-45; 1947) *Professor of Education*
 BJARNE PEARSON, M.D. (1945) *Professor of Pathology*
 JAMES WILLIAM PETERSEN, M.A. (1950) *Instructor in Economics*
 OSCAR SYLVANDER PETERSON, JR., M.D. (1944) *Associate Professor of Radiology*
 THEODORE LIONEL PICHE, D.D.S. (1950) *Instructor in Dental Hygiene*
 HAROLD BARNARD PIERCE, Ph.D. (1937) *Professor of Biochemistry*
 FLORENCE IMOGENE PIZINGER, M.A. (1948) *Instructor in Psychology*
 LENA MILDRED PLAISTED, M.S. (1950) *Assistant Professor of Nursing*
 JAMES EUGENE POOLEY, A.M. (1928) *Associate Professor of Classical Languages and History*
 WILLARD BISSELL POPE, Ph.D. (1934) *Corse Professor of English Language and Literature*
 (On leave, 1950-51)
 ARCHIBALD THOMPSON POST, Ed.M. (1929) *Assistant Professor of Physical Education for Men*
 PLATT RUGAR POWELL, M.D. (1949) *Instructor in Urology*
 WILLIAM ARTHUR PRATT, M.D. (1950) *Instructor in Clinical Medicine*
 MAURICE ALLONZO PRESTON, M/Sgt., U. S. Army (1948) *Instructor in Military Science and Tactics*
 LOUIS BLACKMER PUFFER, C.E. (1921) *Professor of Civil Engineering*
 HERBERT EVERETT PUTNAM, Ph.D. (1931) *Associate Professor of History*
 PHYLLIS MELVILLE QUINBY, B.S. (1949) *Instructor in Dental Hygiene*
 WILHELM RAAB, M.D. (1939) *Professor of Experimental Medicine*
 LOUISE ADELE RAYNOR, Ph.D. (1946) *Assistant Professor of Botany*
 ELMER MCCREADY REED, M.D. (1948) *Instructor in Otolaryngology*
 RALPH EAVISON REED, B.S. (1947) *Instructor in Dairy Manufacturing*
 WALFORD TUPPER REES, M.D. (1925) *Professor of Clinical Surgery*
 FRANC MARIO RICCIARDI, M.A. (1947) *Assistant Professor of Economics*
 WILLIAM HUGH RIDDELL, Ph.D. (1948) *Professor of Animal and Dairy Husbandry*
 ALAN ROBERTS, M.A. (1946-47; 1949) *Assistant Professor of Romance Languages*
 WILLIAM VAN BOGAERT ROBERTSON, Ph.D. (1945) *Associate Professor of Experimental Medicine and Biochemistry*
 JOHN WILLOUGHBY ROBINSON, M.A. (1948) *Instructor in Political Science*
 THORNTON BOSWELL ROBY, Ph. D. (1950) *Assistant Professor of Psychology*
 ELEANOR LOUISE ROCKWOOD, B.S. (1949) *Instructor in Home Economics*
 RUTH MARY GORHAM ROHDE (Mrs. K. L.) B.S. (1950) *Instructor in Home Economics*
 LELAND HAROLD ROLOFF, M.A. (1951) *Instructor in Speech (2nd Semester)*
 ALBAN BENNETT ROONEY, M.S. (1922) *Assistant Professor of Physics*

- JAMES ALBERT ROOT, B.S. (1948) *Instructor in Civil Engineering*
(On leave, 1950-51)
- LYMAN SMITH ROWELL, M.S. (1925) *Associate Professor of Zoology*
- VIOLA RUSSELL, M.D. (1942) *Lecturer in Family Living and Instructor in Public Health*
- CHARLES BRUSH RUST, M.D. (1948) *Instructor in Orthopedic Surgery*
- AMBROSE SAINDON, A.B. (1947) *Instructor in Romance Languages*
- JACOB SAMUEL SAUER, Colonel, U.S. Army, B.S. (1949)
Professor of Military Science and Tactics
- RICHARD HENRY SAUNDERS, JR., M.D. (1950)
Assistant Professor of Clinical Pathology and Medicine
- WADDI ISSA SAWABINI, D.D.S. (1950) *Instructor in Dental Hygiene*
- ROBERT NEWTON SAXBY, M.D. (1950) *Instructor in Radiology*
- ARNOLD HAROLD SCHEIN, Ph.D. (1947) *Assistant Professor of Biochemistry*
- EDWIN CALVIN SCHNEIDER, M.S. (1946)
Associate Professor of Agricultural Engineering
- HAROLD SEESSEL SCHULTZ, Ph.D. (1946) *Associate Professor of History*
- GEORGE ADAM SCHUMACHER, M.D. (1950) *Professor of Neurology*
- ROBERT NELSON SEARLES, A.B. (1948) *Instructor in Physical Education for Men*
- JOHN HAROLD SHIELDS, M.A. (1948) *Instructor in Physics*
- LAURENCE FOREST SHOREY, M.S. (1926)
Assistant Professor of Electrical Engineering
- FERDINAND JACOB MORRIS SICHEL, Ph.D. (1937) *Professor of Physiology*
- ROBERT GOODFELLOW SIDLE, M.M.E. (1945)
Associate Professor of Mechanical Engineering
- RUTH GERTRUDE SIMOND, Ph.D. (1948) *Assistant Professor of Mathematics*
- ETHAN ALLEN HITCHCOCK SIMS, M.D. (Feb. 1950)
Assistant Professor of Biochemistry and Medicine
- HOWARD DARELL SLACK, D.D.S. (1950) *Instructor in Dental Hygiene*
- WILLIAM JOSEPH SLAVIN, M.D. (1942)
Associate Professor of Clinical Obstetrics and Gynecology
- ROBERT FREDERICK SMILEY, Captain, U.S. Army, B.S. (1949)
Assistant Professor of Military Science and Tactics
- DONALD FOSS SMITH, Ph.D. (1945) *Associate Professor of Chemistry*
- HOWARD MARSHALL SMITH, JR., M.S. (1947)
Associate Professor of Electrical Engineering
- ARTHUR BRADLEY SOULE, JR., M.D. (1928) *Professor of Radiology*
- JOSEPH WORCESTER SPELMAN, M.D. (1948) *Assistant Professor of Pathology*
- THOMAS SPROSTON, JR., Ph.D. (1946) *Associate Professor of Botany*
- ERNEST STARK, M.D. (1945) *Associate Professor of Pathology*
- MRS. SADAH SHUCHARI START (1946-48; 1949) *Instructor in Music*
- CHARLES WATTLES STEPHENSON, M.D. (1948)
Assistant Professor of Psychiatry

- ROBERT PRINDLE STORY, M.S. (1947)
Assistant Professor of Agricultural Economics
- NORMAN KENNETH STRASSBURG, B.S. (1946)
Instructor in Physical Education for Men
- WALTER ALVA STULTZ, Ph.D. (1937)
Associate Professor of Anatomy
- MARY BURKE SULLIVAN, A.M. (1934)
Assistant Professor of English and Supervisor of Student Teaching
- RALPH DANIEL SUSSMAN, M.D. (1946)
Assistant Professor of Pediatrics
- CHARLES IVES TAGGART, D.M.D. (1942)
Assistant Professor of Oral Hygiene and Dental Medicine
- FRED HERBERT TAYLOR, Ph.D. (1943)
Associate Professor of Botany
- CHRISTOPHER MARLOWE TERRIEN, M.D. (1939)
Instructor in Clinical Medicine
- LOUIS GEORGE THABAULT, M.D. (1939)
Instructor in Surgery
- CHARLES MAIR THOMSON, B.S. (1948)
Instructor in Mechanical Engineering
- FREDERICK CHARLES THORNE, Ph.D., M.D. (1939)
Assistant Professor of Psychiatry
- RANDOLPH SHEPARDSON TOWNE, A.M. (1928)
Assistant Professor of Romance Languages
- EDWARD LAWRENCE TRACY, B.S. (1943)
Instructor in Public Health
- JACK TREVITHICK, Ph.D. (1946)
Assistant Professor of English
- KEITH FRANK TRUAX, M.D. (1932)
Associate Professor of Surgery
- JAMES HILTON TURNER, Ph.D. (1947)
Assistant Professor of Classical Languages
- ARTHUR FREDERICK TUTHILL, M.S. (1946)
Assistant Professor of Mechanical Engineering
- MARSHALL COLEMAN TWITCHELL, JR., M.D. (1942)
Assistant Professor of Ophthalmology
- HIRAM EUGENE UPTON, M.D. (1930)
Associate Professor of Clinical Medicine
- FREDERICK WILLIAM VAN BUSKIRK, M.D. (1946)
Associate Professor of Radiology
- RICHARD ALTON VAN NOSTRAND (1951)
Lecturer in Economics (2nd Semester)
- KENNETH EVERSON VARNEY, M.S. (1946)
Assistant Professor of Agronomy
- JOHN EDWARD VOLLMER, M.A. (1950)
Instructor in Mathematics
- BENJAMIN BOOTH WAINWRIGHT, A.M. (1925)
Associate Professor of English
- NELSON LEE WALBRIDGE, Ph.D. (1924)
Professor of Physics
- LESTER JULIAN WALLMAN, M.D. (1948)
Assistant Professor of Neurosurgery
- FRANCES RUTH WATSON, M.S. (1950)
Instructor in Zoology
- SELINA WILLIAMS WEBSTER (Mrs. T. M.), M.S. (1948)
Instructor in Home Economics
- TRUMAN MARION WEBSTER, A.B. (1945)
Assistant Professor of German
- FRANCIS ALEXANDER WEINRICH, M.A. (1950)
Instructor in Music
- FLOYD GERALD WERNER, Ph.D. (1950)
Assistant Professor of Zoology
- DAVID ELLIOTT WHITE, A.M.: (1949)
Assistant Professor of Economics
- HILTON ADDISON WICK, LL.B. (1949)
Instructor in Economics
- SUMNER WILLARD, Ph.D. (1947)
Assistant Professor of Romance Languages
- ATHOLL LIVINGSTONE WILSON, M.A. (1948)
Instructor in Mathematics

CHARLOTTE CYERT WILSON (Mrs. A. L.), M.S. (1949)	<i>Instructor in English</i>
WALTER LeROY WILSON, Ph.D. (1949)	<i>Instructor in Physiology and Biophysics</i>
EPHRAIM WOIL, M.D. (1949)	<i>Associate Professor of Pathology</i>
GLEN MEREDITH WOOD, Ph.D. (1950)	<i>Associate Professor of Agronomy</i>
FLORENCE MAY WOODARD, Ph.D. (1923)	<i>Associate Professor of Economics</i>
HAROLD GRAY WOODRUFF, M/Sgt. U.S. Army (1949)	<i>Instructor in Military Science and Tactics</i>
RICHARD S. WOODRUFF, M.D. (1950)	<i>Instructor in Pathology</i>
LLOYD ABRAM WOODWARD, M.S. (1920)	<i>Assistant Professor of Physics</i>
ALBERT W. WURTHMANN, M.A. (1947)	<i>Assistant Professor of German</i>
WILLIAM GREENHILL YOUNG, M.D. (1949)	<i>Assistant Professor of Psychiatry</i>

Associates and Assistants

WILLIAM JOSEPH ADELMAN, JR., B.S.	<i>Research Assistant in Physiology and Biophysics</i>
ANN RUTH BAKER	<i>Research Assistant in Biochemistry</i>
CHARLES ALLEN BLOOD, JR., B.S.	<i>Graduate Assistant in Chemistry</i>
DALLAS RICHARD BOUSHEY	<i>Demonstrator in Anatomy</i>
GEORGE WILSON BROOKS, B.S.	<i>Assistant in Psychiatry</i>
NANCY JOAN CANTOR, A.B.	<i>Research Assistant in Physiology and Biophysics</i>
FOSTER HAMMOND CHASE, B.A.	<i>Graduate Assistant in Geology</i>
GLORIA ANN CHRYSTOWSKI, B.S.	<i>Research Assistant in Biochemistry</i>
LEO LOUIS CONTOIS, JR., B.S.	<i>Graduate Assistant in Chemistry</i>
WILLIAM ALEXANDER DEMEESTER, A.B.	<i>Graduate Assistant in Chemistry</i>
MRS. ANN DINSE, B.A.	<i>Research Assistant in Pathology</i>
PETER STEVENSON FINLAY, B.S.	<i>Graduate Assistant in Zoology</i>
STEPHEN GATES, B.S.	<i>Research Assistant in Chemistry</i>
WILDA ROMAYNE GIGEE, A.B.	<i>Research Assistant in Experimental Medicine</i>
LISELOTTE HECHT, B.S.	<i>Research Assistant in Pathology</i>
WILLIAM HENRY HEININGER, M.D.	<i>Assistant in Medicine</i>
RICHARD LEE HOEBEKE, A.B.	<i>Graduate Assistant in Chemistry</i>
RALPH ALBERT HORNE, B.S.	<i>Graduate Assistant in Chemistry</i>
BETH KNEEN HUARD, B.S.	<i>Assistant in Biochemistry</i>
PAUL ROGER KIMBALL, B.A.	<i>Assistant in Romance Languages</i>
MRS. LORRAINE KORSON, A.B.	<i>Research Assistant in Pathology</i>
ROY KORSON, A.B.	<i>Assistant in Pathology</i>
SUSAN ANN LANE, A.B.	<i>Assistant in Bacteriology</i>
ALICE MARGARET LAUGHLIN, B.S.	<i>Graduate Assistant in Biochemistry</i>
JOHN HENRY McCREA, M.D.	<i>Assistant in Medicine</i>
KATHRYN ANN MEARS, B.S.	<i>Graduate Assistant in Botany</i>
BARBARA ALICE MOORE	<i>Assistant in Biochemistry</i>

MRS. ELIZABETH TOWLE OHNO, B.A.
 LAURENCE THOMAS PLANTE, B.S.
 WASIL PLASKONOS, B.S.
 ESTELLE PODBER, A.B.
 JOHN KINGSLEY POLLARD, JR., A.B.
 JEAN MARGARET RYAN, B.S.
 ELMER CORLISS SANBORN
 BARRY F. SCHWARTZ, B.S.
 SARAH GOODWIN THOMPSON, B.A.
 JACKSON WARD WISNER, JR., B.S.
 EMILY MAE YOUNG, B.S.

Assistant in Chemistry
Graduate Assistant in Chemistry
Graduate Assistant in Chemistry
Research Assistant in Pathology
Graduate Assistant in Botany
Research Assistant in Pathology
Research Assistant in Experimental Medicine
Graduate Assistant in Biochemistry
Assistant in History
Graduate Assistant in Chemistry
Assistant in Biochemistry

FELLOWS

ANTONIO BARDAWIL, M.D.
 RICHARD EMILE BOUCHARD, M.D.
 LUTHER WILLARD BUBER, M.D.
 ROSE ELIZABETH CILIBERTO, M.D.
 PORTER HINMAN DALE, M.D.
 WILLIAM THOMAS FAGAN, JR., M.D.
 HOWARD HINMAN JACOBS, M.D.
 WILLIAM HERBERT JOHNSTON, M.D.
 JOHN KEVORK KAVOUKSORIAN, M.D.
 KERMIT EDWARD KRANTZ, M.D.
 RAYMOND FRANK KUHLMANN, M.D.
 JAMES BISHOP MCGILL, M.D.
 *CLARENCE JAMES MURPHY, M.D.
 *HAROLD GORDON PAGE, M.D.
 ALBERT MALMROSE PEARSON, M.D.
 FRANK IVAN PITKIN, M.D.
 WILLIAM EBBERT PURNELL, M.D.
 EUNICE MARIE SIMMONS, M.D.
 ANTHONY JOSEPH TABACCO, M.D.
 BURTON S. TABAKIN, M.D.
 HENRY THOMAS TULIP, M.D.
 ABEL TURNIER, M.D.
 ROBERT CHARLES WARNER, M.D.
 DEAN HERBERT WHEELER, M.D.
 CHARLOTTE SCHULER WOODRUFF, M.D.
 SUMNER JASON YAFFE, M.A.

Pathology
Physiology and Biophysics
Anesthesia
Pediatrics
Medicine
Urology
Anesthesia
Radiology
Surgery
Obstetrics and Gynecology
Orthopedic Surgery
Surgery
Surgery
Surgery
Urology
Medicine
Radiology
Medicine
Radiology
Medicine
Urology
Pathology
Surgery
Medicine
Anesthesia
Pharmacology

* Absent on Military Service.

UNIVERSITY COUNCIL, 1950-1951

The President; the Deans of the Colleges, the Dean of Women; and the Dean of Administration.

COMMITTEES OF THE UNIVERSITY, 1950-1951

- ADMISSIONS:** P. A. Fraleigh (Chairman), T. M. Adams, T. J. Sproston, S. L. Johnston, F. C. Koerner, R. G. Cooley, F. W. Dunihue, Director of Admissions, the Deans.
- ADULT EDUCATION:** J. C. Huden (Chairman), F. P. Colburn, R. N. B. Haugen, F. C. Marston, L. E. Knollmeyer, E. M. Luse, I. Pappoutsakis, H. S. Schultz, the Registrar, the Director of Adult Education.
- BUILDINGS AND GROUNDS:** A. F. Tuthill (Chairman), R. S. Babcock, C. H. Blasberg, F. W. Dunihue, Director of Land Records Office, Superintendent of Buildings and Grounds, Dean of Administration.
- CEREMONIES:** T. M. Webster (Chairman), I. Pappoutsakis, L. F. Shorey, Helen Beresford, D. C. Gregg, R. H. Humphrey, Nelle Adams, C. A. Newhall, Colonel J. S. Sauer, the University Marshal.
- CURRICULUM:** H. B. Pierce (Chairman), R. G. Sidle, Florance King, J. H. Loch-head, Mary Sullivan.
- LIBRARY:** F. J. M. Sichel (Chairman), S. N. Bogorad, W. R. Adams, C. H. Blasberg, D. C. Gregg, J. H. Kent, S. Willard, the Librarian and Assistant Librarian.
- MUSEUM:** F. P. Colburn (Chairman), Eleanor M. Luse, B. Pearson, J. H. Turner, Isabel Mills, C. G. Doll, L. E. Knollmeyer, Louise Raynor, R. F. Doane, The Director.
- POLICY:** L. S. Rowell (Chairman), E. L. Amidon, C. E. Braun, P. D. Evans, J. E. Marvin.
- PUBLICATIONS:** Betty Bandel (Chairman), F. W. Gallagher, A. Gershoy, A. Roberts, Director of Public Relations, Dean of Administration, Extension Editor.
- PUBLIC RELATIONS:** W. H. Riddell (Chairman), E. L. Amidon, J. W. Robinson, R. J. McKay, R. B. Huber, F. N. Hamblin, J. W. Spaven, the Deans, the Director of Public Relations.
- RELIGIOUS LIFE:** E. J. Dole (Chairman), Constance Brown, H. H. Kahn, Miriam N. Marston, H. M. Smith, Mary B. Sullivan, R. A. Hall.
- STUDENT ADVISORY:** W. R. Adams (Chairman), Florence E. Bailey, R. N. B. Haugen, J. E. Little, Florence M. Woodard, N. L. Walbridge, T. M. Webster, S. T. Allen, Dolores DiRubbo, D. Marburg, F. C. Marston, Assistant Dean of Women, Dean of Administration.
- STUDENT AID:** H. C. Collins (Chairman), P. A. Moody, J. A. Newlander, Ruth Simond, A. T. Post, the Deans, the Assistant Treasurer.
- STUDENT HEALTH:** Elizabeth Wilson (Chairman), Ray Collins, J. F. Bell, J. C. Evans, C. W. Stephenson, Jean Ichter, Eleanor Cummings, The Director of the Infirmary, the Medical Director.
- STUDENT PERSONNEL:** G. Dykhuizen (Chairman), Muriel J. Hughes, Esther L. Knowles, J. E. Pooley, D. F. Smith, F. H. Taylor, G. R. Hopwood, Director of Student Personnel.
- ATHLETIC COUNCIL:** C. E. Braun, F. D. Carpenter, P. P. Lawlor, D. B. Johnstone.

Laboratory Demonstration and Practice Schools Elementary Education

Demonstration Schools

Elihu B. Taft School—Burlington

CATHERINE C. CARTIER	Supervising Principal
CATHERINE M. O'BRIEN	Grade 6
MRS. ANTOINETTE BURKE	Grade 5
MRS. ERNA L. BENEDICT	Grade 4
MRS. PERSIS G. POST	Grade 3
A. FERN SOUTHER	Grade 2
FLORENCE M. FISHER	Grade 1
MRS. RUTH P. INGERSOLL	Kindergarten

Practice Schools

Adams School—Burlington

MARY K. McDERMOTT	Supervising Principal
ELSIE A. TINKER	Grade 5
HELEN M. RANSOM	Grade 2

Ira Allen School—Burlington

MARY K. McDERMOTT	Supervising Principal
MRS. RUTH S. AINSWORTH	Grade 6
NINA P. CRAM	Grade 5
ETHEL P. SYMES	Grade 4
DOROTHY L. PARKER	Grade 3
FLORENCE G. GREENE	Grade 1

Lawrence Barnes School—Burlington

MRS. MARGARET S. COTEY	Supervising Principal
MRS. MARION K. WILKINSON	Grade 6
KATHRYN E. HUBBARD	Grade 2

Champlain School—Burlington

MRS. MARGARET S. COTEY	Supervising Principal
BETTY L. TAYLOR	Grade 5
MRS. CONSTANCE JARVIS	Grade 4
MRS. JUNE D. WILLIAMS	Grade 2
MRS. MARY J. BUTTLES	Grade 1

Converse School—Burlington

MRS. MARGARET S. COTEY	Supervising Principal
MRS. GRACE S. HARTWELL	Grade 5
MRS. PEARL McGRATH	Grade 4
MRS. BESSIE F. ROOT	Grade 2
ROSEMARY LEWIS	Grade 1

ELIHU B. TAFT SCHOOL—Burlington

MRS. PERSIS G. POST	Grade 2
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S. W. Thayer School—Burlington

MRS. DORIS A. SOMAINI

JEAN A. MURPHY

RITA C. KEEFE

Supervising Principal, Grade 1-2

Grade 3

Grade 1

H. O. Wheeler School—Burlington

CATHERINE C. CARTIER

MARJORIE M. McGRATH

LILLIAN E. TERRILL

Supervising Principal

Grade 6

Grade 2

Vocational Education*Agricultural Education*

COLA D. WATSON, M.Ed.

JAMES E. WOODHULL, M.S.

CEDRIC A. LAFLEY, M.Ed.

State Supervisor

State Teacher Trainer

Assistant State Supervisor

Supervisors of Student Teaching

J. ARTHUR PETERS

BURTON GREGG

MERLIN WELLS

HENRY ROSS

RICHMOND YOUNG

WAYNE TWOMBLY

HAROLD HAYNES

WILFRED LESLIE

DONALD PIERCE

WILLIAM PETERS

Bradford Academy

Brattleboro High School

Highgate High School

Lyndon Institute

Middlebury High School

(Morrisville) Peoples Academy

North Troy High School

Orleans High School

Richford High School

Thetford Academy

Distributive Education

JOHN M. MORROW, M.C.S.

State Supervisor

Homemaking Education

HELEN FINNEGAN, M.S.

MARION H. BROWN, M.S.

State Supervisor

State Teacher Trainer

Trade and Industrial Education

HAROLD F. GRAEME, M.Ed.

NEAL B. PERKINS, B.Ed.

GILBERT A. MARSHALL, B.S.

JOHN LANCE

F. DONALD HAVENS

State Supervisor

State Teacher Trainer

Assistant

Assistant

Assistant

AGRICULTURAL EXPERIMENT STATION STAFF

JOSEPH EDWARD CARRIGAN, A.M., LL.D., D.Ec.Sc.	Director
PAUL ROBERT MILLER, M.S.	Associate Director
EDMUND MORTON ROOT, B.S.	Assistant to the Director
THURSTON MADISON ADAMS, Ph.D.	Agricultural Economist
WILLIAM RITCHIE ADAMS, JR., Ph.D.	Forester
HENRY VERNON ATHERTON, M.S.	Assistant in Research, Animal and Dairy Husbandry
HERBERT PATTERSON BEAM, B.A.	Assistant in Research, Botany
CHARLES HUGO BLASBERG, M.S.	Horticulturist
WESSON DUDLEY BOLTON, D.V.M., M.S.	Assistant Animal Pathologist
ALEC BRADFELD, M.S.	Associate in Dairy Manufacturing
OSMAN MYRON CAMBURN, M.S.	Associate Animal and Dairy Husbandman
ROBERT McCRILLIS CARTER, JR., Ph.D.	Rural Sociologist
HORACE JOHN DANIELS, B.A.	Research Assistant in Microbiology
MARGUERITE JULIA DOHENY, B.S.	Administrative Assistant
WINFIELD BOOTH DURRELL, D.V.M., M.S.	Assistant Animal Pathologist
GEORGE MACINTOSH ENGLAND, B.S.	Research Assistant in Agricultural Economics
ROBERT FITZSIMMONS, M.S.	Assistant in Dairy Production
MURRAY WILBUR FOOTE, B.S.	Assistant Chemist
JAMES MARSHALL FRAYER, M.S.	Associate Dairy Bacteriologist
ALEXANDER GERSHOY, Ph.D.	Geneticist
MARY THORNE GREENE, B.S.	Assistant in Research, Botany
*DONALD CEDRIC HENDERSON, M.S.	Poultryman
FREDERICK SHERMAN HOPKINS, JR., M.F.	Assistant Forester
RICHARD JOHN HOPP, M.S.	Assistant Horticulturist
EDWARD PUTNAM HUME, M.S.	Ornamental Horticulturist
BENJAMIN ANGUS JONES, JR., M.S.	Assistant Agricultural Engineer
FLORANCE BEESON KING, Ph.D.	Nutritionist
DONALD BOYES JOHNSTONE, Ph.D.	Microbiologist
CHARLES HOWLAND JONES, M.S.	Chemist (Retired)
†JOSEPH BURNHAM KELLY, M.S.	Assistant Agronomist
JOHN ERNEST LITTLE, Ph.D.	Biochemist
*LEO RENNIE LORANGER	Administrative Clerk
JAMES WALLACE MARVIN, Ph.D.	Plant Physiologist
SUSAN BREWSTER MERROW, M.Ed.	Assistant Nutritionist
JOSEPH FRANK METZ, JR., B.S.	Research Assistant in Agricultural Economics
ALVIN REES MIDGLEY, Ph.D.	Agronomist

* On leave of absence.

† On military leave, February 1, 1951.

MARIANNE MUSE, M.S.	<i>Home Economist</i>
JOHN ALVIN NEWLANDER, Ph.D.	<i>Associate Animal and Dairy Husbandman</i>
RALPH EAVISON REED, B.S.	<i>Assistant in Dairy Manufacturing</i>
WILLIAM HUGH RIDDELL, Ph.D.	<i>Animal and Dairy Husbandman</i>
EDWIN CALVIN SCHNEIDER, M.S.	<i>Agricultural Engineer</i>
LESTER HURLIN SMITH, M.S.	<i>Assistant Agronomist</i>
JOHN WALLACE SPAVEN, B.S.	<i>Editor</i>
THOMAS SPROSTON, JR., Ph.D.	<i>Plant Pathologist</i>
ROBERT PRINDLE STORY, M.S.	<i>Assistant Agricultural Economist</i>
FRED HERBERT TAYLOR, Ph.D.	<i>Plant Morphologist</i>
RAYMOND HERMAN TREMBLAY, M.S.	<i>Assistant Agricultural Economist</i>
KENNETH EVERSON VARNEY, M.S.	<i>Assistant Agronomist</i>
CARL HENRY VON LAUTZ	<i>Acting Administrative Clerk</i>
KATHLEEN BEAVINGTON WEBB, B.S.	<i>Assistant Editor</i>
HARRY CROSSMAN WHELDEN, JR., B.S.	<i>Assistant Poultryman</i>
GLEN MEREDITH WOOD, Ph.D.	<i>Associate Agronomist</i>

ENGINEERING EXPERIMENT STATION STAFF

EDD RUTHVEN McKEE, M.S., E.E.	<i>Director and Electrical Engineer</i>
LOUIS BLACKMER PUFFER, C.E.	<i>Civil Engineer</i>
ROBERT GOODFELLOW SIDLE, M.M.E.	<i>Mechanical Engineer</i>
MARION E. WILLIS	<i>Secretary</i>

EXTENSION SERVICE STAFF

JOSEPH EDWARD CARRIGAN, A.M., LL.D., D.Ec.Sc.	<i>Director</i>
PAUL ROBERT MILLER, M.S.	<i>Associate Director</i>
EDMUND MORTON ROOT, B.S.	<i>Assistant to the Director</i>
THURSTON MADISON ADAMS, Ph.D.	<i>Agricultural Economist</i>
CHARLOTTE ANNABEL BEATTY, B.S.	<i>Home Management Specialist</i>
CHARLES HUGO BLASBERG, M.S.	<i>Horticulturist</i>
WESSON DUDLEY BOLTON, D.V.M., M.S.	<i>Assistant Animal Pathologist</i>
CHARLES LYMAN CALAHAN, M.S.	<i>Horticulturist</i>
ROBERT POWERS DAVISON, M.Ed.	<i>State Agricultural Agent Leader</i>
WARREN ALBERT DODGE, B.S.	<i>Dairyman</i>
MARGUERITE JULIA DOHENY, B.S.	<i>Administrative Assistant</i>
RAYMOND THOMAS FOULDS, JR., B.S.	<i>Forester</i>
*DONALD CEDRIC HENDERSON	<i>Poultryman</i>
VERLE RANDALL HOUGHABOOM, M.S.	<i>Assistant Agricultural Economist</i>
EDWARD PUTNAM HUME, M.S.	<i>Ornamental Horticulturist</i>
BENJAMIN ANGUS JONES, JR., M.S.	<i>Assistant Agricultural Engineer</i>

* On leave of absence.

Experiment Station and Extension Service Staffs 213

WILLIAM PATRICK LEAMY, B.S.	<i>Assistant Dairyman</i>
*LEO RENNIE LORANGER	<i>Administrative Clerk</i>
MARJORIE ELLINWOOD LUCE, B.S.	<i>State Home Demonstration Leader</i>
JOHN DOTY MERCHANT, B.S.	<i>State 4-H Club Agent Leader</i>
MARY PAULINE ROWE, B.S.	<i>Assistant State 4-H Club Agent Leader</i>
EDWIN CALVIN SCHNEIDER, M.S.	<i>Agricultural Engineer</i>
LESTER HURLIN SMITH, M.S.	<i>Agronomist</i>
JOHN WALLACE SPAVEN, B.S.	<i>Editor</i>
CARL HENRY von LAUTZ	<i>Acting Administrative Assistant</i>
MARGARET JEANNE WALLERIUS, B.S.	<i>Assistant Editor</i>
KATHLEEN BEAVINGTON WEBB, B.S.	<i>Assistant Editor</i>
HARRY CROSSMAN WHELDEN, JR., B.S.	<i>Assistant Poultryman</i>
MARGARET JUNE WILLIAMS, M.A.	<i>Clothing Specialist</i>
ANNA MARIAN WILSON, M.S.	<i>Nutritionist</i>

County Agricultural Agents

Addison County

<i>Agricultural:</i> LUCIEN DEMERS PAQUETTE, B.S.	Middlebury
<i>Home Demonstration:</i> MRS. LEONA WARREN THOMPSON, B.S.	Middlebury
<i>Club:</i> HARRIET ELLICE PROCTOR, B.S.	Middlebury

Bennington County

<i>Agricultural:</i> HARRY ROBERT MITIGUY, B.S.	Bennington
<i>Home Demonstration:</i> MRS. ANNE HUCKINS BUTTERFIELD	(Acting) Bennington
<i>Club:</i> SEAVER DAVID WRIGHT, JR. B.S.	Bennington

Caledonia County

<i>Agricultural:</i> †WILLIAM MICHAEL COREY, B.S.	St. Johnsbury
<i>Home Demonstration:</i> MRS. EDNA BECK KENNELLY	(Acting) St. Johnsbury
<i>Club:</i> MRS. MARGARET TOWER BECK, B.S.	St. Johnsbury

Chittenden County

<i>Agricultural:</i> ROBERT LACKIE CARLSON, B.S.	Essex Junction
<i>Home Demonstration:</i> JENNIE MAY SWETT, B.S.	Essex Junction
<i>Club:</i> MARGARET CALLAHAN WENTZEL, B.S.	Essex Junction

Essex County

<i>Agricultural:</i> EARLE DRAKE CLARK, B.S.	Guildhall
<i>Home Demonstration:</i> MRS. FLORENCE MARY CURRIER	(Acting) Guildhall

* On leave of absence.

† On military leave, September 5, 1950.

Franklin County

<i>Agricultural:</i> RALPH CALDWELL McWILLIAMS, B.S.	St. Albans
<i>Home Demonstration:</i> RHODA ALETHA HYDE, A.M.	St. Albans
<i>Club:</i> LILLIAN ANDREWS, B.S.	St. Albans

Grand Isle County

<i>Agricultural:</i> ROBERT ELLIS WHITE, B.S.	North Hero
<i>Club:</i> MRS. LOIS ALGER SOULE, B.S.	North Hero

Lamoille County

<i>Agricultural:</i> FRANK DYER JONES, B.S.	Morrisville
<i>Home Demonstration:</i> MRS. ELIZABETH EMMONS ROBINS, B.S.	Morrisville
<i>Club:</i> TRUE TOWER, B.S.	Morrisville

Orange County

<i>Agricultural:</i> WILSON HOLLISTER BEEBE, B.S.	Chelsea
<i>Home Demonstration:</i> MARY ANNA BURBANK, B.S.	Chelsea
<i>Club:</i> MRS. BETTY WALKER WILKINSON, B.S.	Chelsea

Orleans County

<i>Agricultural:</i> ROGER DAVIS WHITCOMB, B.S.	Newport
<i>Club:</i> MRS. ALICE MARGARET LEONARD (Acting)	Newport

Rutland County

<i>Agricultural:</i> ROY ALLEN BURROUGHS, B.S.	Rutland
<i>Home Demonstration:</i> ALICE JANE PRATT, B.S.	Rutland
<i>Club:</i> EDWIN EMIL BERGSTROM	Rutland

Washington County

<i>Agricultural:</i> ROBERT ORVILLE SINCLAIR, B.S.	Montpelier
<i>Home Demonstration:</i> JEAN MAHANEY, B.S.	Montpelier
<i>Club:</i> MRS. RUTH HAINES TOWNE, B.S.	Montpelier

Windham County

<i>Agricultural:</i> RAYMOND IRVING PESTLE, JR., M.S.	Brattleboro
<i>Home Demonstration:</i> MRS. ETHEL RANDALL MAY (Acting)	Brattleboro
<i>Club:</i> BRUCE ROBERT BUCHANAN, B.S.	Brattleboro

Windsor County

<i>Agricultural:</i> WILLIAM WILLARD STONE, B.S.	Woodstock
<i>Home Demonstration:</i> MRS. JENNIE ARMSTRONG HALL, B.S.	Woodstock
<i>Club:</i> MRS. ISABELLE PAIGE BARDEN, B.S.	Woodstock

RELATED SERVICES STAFF

JOSEPH EDWARD CARRIGAN, A.M., LL.D., D.Ec.Sc.	Director
PAUL ROBERT MILLER, M.S.	Associate Director
EDMUND MORTON ROOT, B.S.	<i>Assistant to the Director and Farm Superintendent</i>
HENRY VERNON ATHERTON, M.S.	<i>Assistant in Research, Animal and Dairy Husbandry</i>
WESSON DUDLEY BOLTON, D.V.M., M.S.	<i>Assistant Animal Pathologist</i>
EUGENE FIELD BOYCE, B.S.	<i>Assistant Chemist, Regulatory Service</i>
ALEC BRADFIELD, M.S.	<i>Associate in Dairy Manufacturing</i>
OSMAN MYRON CAMBURN, M.S.	<i>Associate Animal and Dairy Husbandman and Director of Short Courses and Educational Conferences</i>
MERRILL CHARLES CANEDY	<i>Farm Foreman</i>
MARGUERITE JULIA DOHENY, B.S.	<i>Administrative Assistant</i>
WINFIELD BOOTH DURRELL, D.V.M., M.S.	<i>Assistant Animal Pathologist</i>
ROBERT FITZSIMMONS, M.S.	<i>Assistant in Dairy Production</i>
JAMES MARSHALL FRAYER, M.S.	<i>Associate Dairy Bacteriologist</i>
RICHARD JOHN HOPP, M.S.	<i>Assistant Horticulturist</i>
EDWARD PUTNAM HUME, M.S.	<i>Ornamental Horticulturist</i>
MRS. ANNA SHEPARD LUTMAN, Ph.D.	<i>Seed Analyst, Regulatory Service</i>
JOHN ALVIN NEWLANDER, Ph.D.	<i>Associate Animal and Dairy Husbandman</i>
RALPH EAVISON REED, B.S.	<i>Assistant in Dairy Manufacturing</i>
WILLIAM HUGH RIDDELL, Ph.D.	<i>Animal and Dairy Husbandman</i>
LEWELL SETH WALKER, B.S.	<i>Chemist (Retired), Regulatory Service</i>

Register, 1950-1951

STUDENTS IN RESIDENCE, FALL 1950

COLLEGE OF ARTS AND SCIENCES:

	MEN	WOMEN	TOTAL
Class of 1951	153	69	222
Class of 1952	153	73	226
Class of 1953	123	117	240
Class of 1954	191	119	310
Total	620	378	998
In-state veterans	107	1	108
Out-state veterans	89	0	89
Total	196	1	197
In-state non-veterans	200	164	364
Out-state non-veterans	224	213	437
Total	424	377	801
In-state (veterans and non-veterans)	307	165	472
Out-state (veterans and non-veterans)	313	213	526
Total	620	378	998

BY CURRICULA:

	MEN	WOMEN	TOTAL
Liberal Arts (General)	389	336	725
Liberal Arts (Pre-dental)	29	0	29
Liberal Arts (Pre-medical)	201	16	217
Medical Technology	1	26	27
Total	620	378	998

COLLEGE OF TECHNOLOGY:

	MEN	WOMEN	TOTAL
Class of 1951	194	6	200
Class of 1952	161	6	167
Class of 1953	143	15	158
Class of 1954	142	19	161
Total	640	46	686
In-state veterans	151	0	151
Out-state veterans	135	0	135
Total	286	0	286
In-state non-veterans	152	13	165
Out-state non-veterans	202	33	235
Total	354	46	400

Enrollment Statistics

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	MEN	WOMEN	TOTAL
In-state (veterans and non-veterans)	303	13	316
Out-state (veterans and non-veterans)	337	33	370
Total	640	46	686

BY CURRICULA:

	MEN	WOMEN	TOTAL
Commerce and Economics (Business Administration)	367	18	385
Commerce and Economics (Secretarial Practice)	0	25	25
Engineering—Civil	63	0	63
Engineering—Electrical	86	0	86
Engineering—Management	1	0	1
Engineering—Mechanical	95	0	95
Engineering—Undecided	2	0	2
Professional Chemistry	26	3	29
Totals	640	46	686

COLLEGE OF AGRICULTURE:

	MEN	WOMEN	TOTAL
Class of 1951	60	29	89
Class of 1952	71	34	105
Class of 1953	93	44	137
Class of 1954	93	48	141
Total	317	155	472
In-state veterans	57	1	58
Out-state veterans	38	0	38
Total	95	1	96
In-state non-veterans	129	76	205
Out-state non-veterans	93	78	171
Total	222	154	376
In-state (veterans and non-veterans)	186	77	263
Out-state (veterans and non-veterans)	131	78	209
Total	317	155	472

BY CURRICULA:

	MEN	WOMEN	TOTAL
Agriculture General	227	5	232
Agriculture Engineering	37	1	38
Pre-forestry	21	0	21
Pre-veterinary	32	2	34
Home Economics	0	147	147
Totals	317	155	472

COLLEGE OF EDUCATION AND NURSING:

	MEN	WOMEN	TOTAL
Class of 1951	53	63	116
Class of 1952	43	76	119
Class of 1953	37	103	140
Class of 1954	33	112	145
Total	166	354	520
In-state veterans	56	6	62
Out-state veterans	19	5	24
Total	75	11	86
In-state non-veterans	65	222	287
Out-state non-veterans	26	121	147
Total	91	343	434
In-state (veterans and non-veterans)	121	228	349
Out-state (veterans and non-veterans)	45	126	171
Total	166	354	520

BY CURRICULA:

	MEN	WOMEN	TOTAL
Education—Business	11	7	18
Education—Elementary	1	176	177
Education—Industrial	22	0	22
Education—Junior High	33	41	74
Education—Music	10	14	24
Education—Secondary	89	61	150
Nursing—Basic	0	38	38
Nursing—Education	0	17	17
Total	166	354	520

UNCLASSIFIED DIVISION:

	MEN	WOMEN	TOTAL
Special students	47	24	71
In-state veterans	21	0	21
Out-state veterans	13	0	13
Total	34	0	34
In-state non-veterans	6	14	20
Out-state non-veterans	7	10	17
Total	13	24	37
In-state (veterans and non-veterans)	27	14	41
Out-state (veterans and non-veterans)	20	10	30
Total	47	24	71

GRADUATE DIVISION:

	MEN	WOMEN	TOTAL
Graduate students	94	17	111
In-state veterans	48	0	48
Out-state veterans	23	0	23
Total	71	0	71
In-state non-veterans	12	13	25
Out-state non-veterans	11	4	15
Total	23	17	40
In-state (veterans and non-veterans)	60	13	73
Out-state (veterans and non-veterans)	34	4	38
Total	94	17	111

COLLEGE OF MEDICINE:

	MEN	WOMEN	TOTAL
Class of 1951	35	3	38
Class of 1952	40	0	40
Class of 1953	41	2	43
Class of 1954	43	4	47
Total	159	9	168
In-state veterans	58	0	58
Out-state veterans	50	0	50
Total	108	0	108
In-state non-veterans	22	2	24
Out-state non-veterans	29	7	36
Total	51	9	60
In-state (veterans and non-veterans)	80	2	82
Out-state (veterans and non-veterans)	79	7	86
Total	159	9	168

SCHOOL OF DENTAL HYGIENE:

	MEN	WOMEN	TOTAL
First-year students	0	14	14
Second-year students	0	5	5
Total	0	19	19
In-state	0	16	16
Out-state	0	3	3
Total	0	19	19

Note: There are no veterans enrolled in the School of Dental Hygiene.

SUMMARY OF RESIDENT ENROLLMENT

FALL SEMESTER, 1950-1951

THE UNDERGRADUATE COLLEGES:			
	MEN	WOMEN	TOTAL
College of Arts and Sciences	620	378	998
College of Technology	640	46	686
College of Agriculture	317	155	472
College of Education and Nursing	166	354	520
Unclassified Division	47	24	71
Total	1790	957	2747
THE GRADUATE DIVISION			
	94	17	111
THE COLLEGE OF MEDICINE			
	159	9	168
Total	2043	983	3026
THE UNDERGRADUATE COLLEGE BY CLASSES:			
	MEN	WOMEN	TOTAL
Class of 1951	460	167	627
Class of 1952	428	189	617
Class of 1953	396	279	675
Class of 1954	459	298	757
Total	1743	933	2676
BREAKDOWN OF UNDERGRADUATE, UNCLASSIFIED, GRADUATE AND MEDICAL STUDENTS:			
	MEN	WOMEN	TOTAL
In-state veterans	498	8	506
Out-state veterans	367	5	372
Total veterans	865	13	878
In-state non-veterans	586	504	1090
Out-state non-veterans	592	466	1058
Total non-veterans	1178	970	2148
In-state (veterans and non-veterans)	1084	512	1596
Out-state (veterans and non-veterans)	959	471	1430
Total	2043	983	3026
In addition to the above regularly enrolled students are the following:			
	MEN	WOMEN	TOTAL
Resident Fellows—Medical (veterans)	11	0	11
Resident Fellows—Medical (non-veterans)	5	3	8
Pre-clinic Nurses (non-veterans)	0	97	97
School of Dental Hygiene (non-veterans)	0	19	19
Total	16	119	135
GRAND TOTAL—FALL SEMESTER			
	3161		

Degrees and Prizes

COMMENCEMENT — MONDAY, JUNE 12, 1950

SCHOOL OF EDUCATION AND NURSING

BACHELORS OF SCIENCE IN NURSING

Rebecca Caldwell, Salem, Mass.

Elizabeth Knox Hazelton, Rutherford,
N. J.

Marguerite Esther Kebrek, Bristol, R. I.

BACHELORS OF SCIENCE IN NURSING EDUCATION

*Althea Warren Burns, W. Hartford,
Conn.

Rita Ardelle Cleveland, Huntington
Center

Barbara Anne Fradenburgh, Bennington

†Jean Therese Gregory, Ripton

Bernice Mildred Noah, Charlton, Mass.

Vivienne Eileen Olsen, Burlington

Gladys Marianne Peloquin, N. Adams,
Mass.

Eleanor Margaret Rodgers, Ogdensburg,
N. Y.

*Helen Louise Schauer, Ely

BACHELORS OF SCIENCE IN BUSINESS EDUCATION

Alice Rooney Benson, St. Albans

Marilyn Rita Pienberg, Bennington

Harriet Bertha Gregory, Morrisville

Carol Ann Kellogg, Essex Junction

Joyce Hope Lane, Barre

Donald Neil Stewart, Jeffersonville

BACHELORS OF SCIENCE IN MUSIC EDUCATION

Jean Avis Hurlburt, New Haven

Helen Jean MacLaughlin, Burlington

David Herschel Wheeler, Burlington

BACHELORS OF SCIENCE IN EDUCATION

Robert Paul Abbiati, Barre

Hedi Stoehr Ballantyne, Winooski

Audrey Louise Barnard, Pittsford

*Louise Pearle Barnes, Montpelier

Carolyn Chapman Barrows, Vergennes

Barbara Alice Beals, Burlington

Evelyn Grace Bemis, Jacksonville

Lois Minola Black, Lexington, Mass.

Walton Allen Brown, Brooklyn, N. Y.

Edith Jean Carlson, Essex Junction

Richard Victor Casavant, Burlington

*Edna Hannah Cole, S. Lyndeboro, N. H.

Dorothy Lee Conron, N. Reading, Mass.

Hobart Wells Cook, Jr., Auburn, Me.

Ella May Covey, Underhill

Newell Hill Curtis, Jr., Montpelier

Walter Howard Delano, Burlington

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ter, Mass.

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 William Thomas Logan, Jr., A.B. (Boston Univ.), 1949
- *Wallace Albert Martin, B.S. (Norwich), 1940

* As of October 15, 1949. † As of February 18, 1950.

- *Clyde Andrew Maxfield, B.S. in Ed. (UVM), 1936
 *Rose Mary Miller, B.S. (Middlebury), 1933
 William Thomas Owen, A.B. (Westminster), 1926
Thesis: The Utilization of Available Guidance Services by High School Juniors and Seniors
 Biagio Palermo, B.S. (UVM), 1943
 Wayne Leslie Parker, B.A. (Texas Western College), 1949
 †Harry James Patterson, B.S. in Ed. (Boston Univ.), 1931
 †Cedric Errol Pierce, B.S. (UVM), 1924
 *William Knipe Root, B.S. (Boston Univ.), 1940
 *Barbara Bradford Rose, B. Ed. (Castleton Teachers College), 1943
 Emily Adaline Ross, B.S. (Arnold College), 1938
 *Lafayette Ludovic Saucier, A.B. (St. Michael's), 1940
 Manuel Setien, B.S. (UVM), 1949
 Felix Siegl, B.S. (Columbia), 1939
Thesis: Planning Ahead for a Rural High School in Vermont
 Stuart James Smith, B.A. (UVM), 1949
 Joseph John Solari, B.E., B.S. in Ed. (Castleton Teachers College), 1946, 1948
 *Waldo Russell Streeter, B.Ed. (Keene Teachers College), 1936
 †Cola Delmare Watson, B.S. (UVM), 1933
 David Bayley Wheeler, B.S. in Ed. (UVM), 1948
 Richmond Alton Young, B.S. (Univ. of Conn.), 1934

MASTERS OF ARTS IN TEACHING

- Albert Joseph Cichon, B.S. in Ed. (UVM), 1949
 Edwin Ivan Cleveland, B.A. (Norwich), 1949
 Gerald Henry Greemore, B.S. in Ed. (UVM), 1949
 Warren Howard Proctor, B.S. in Ed. (UVM), 1949
 *Rita Muriel Ryan, B.A. (St. Joseph), 1942

MASTERS OF ARTS

ENGLISH

- John Akey, Ph.B. (St. Michael's), 1940
Thesis: Liturgical Imagery in the Poetry of Gerard Manley Hopkins, Thomas Merton and Robert Lowell
 *Roland Gilbert Duval, A.B. (St. Michael's), 1948
Thesis: Influence of Moliere on John Dryden
 †Eleanor Beatrice Miller, A.B. (Smith), 1927
Thesis: Romance Elements in the Gesta Romanorum

GERMAN

- Franklin Wardner Marshall, B.A. (Univ. of Conn.), 1949
Thesis: The Young Hugo Von Hofmannsthal

HISTORY

- Robert Clayton Sayre, B.S. in C. & E. (UVM), 1942
Thesis: Gouverneur Morris in Formal Mission to England—1790
 * As of October 15, 1949. † As of February 18, 1950.

ROMANCE LANGUAGES

Alan Quentin Steinecke, B.S. in Ed. (UVM), 1949

Thesis: Evolution of Responsibility in Sartre's Philosophy as It Is Evincing in His Literary Works

MASTERS OF SCIENCE

AGRICULTURAL BIOCHEMISTRY

Murray Wilbur Foote, B.S. (UVM), 1938

Thesis: On Naphthoquinones as Inhibitors of Spore Germination of Fungi

AGRICULTURAL ECONOMICS

†Kenneth Pierpont Brundage, B.S. (Univ. of Conn.), 1941

Thesis: Economic Aspects of Labor Use in Vermont Milk Receiving Stations

Sherman Keith Sprague, B.S. (UVM), 1948

Thesis: A Study of Milk Price Control in Vermont

AGRONOMY

William Michael Corey, B.S. (UVM), 1947

Thesis: Water Table Studies in Vermont Soils

ANIMAL AND DAIRY HUSBANDRY

†Henry Vernon Atherton, B.S. Agr. (UVM), 1948

Thesis: The Utilization of Defrosted Frozen Cream as a Source of Fat in Commercial Fluid Cream

Robert Fitzsimmons, B.S. Agr. (UVM), 1947

Thesis: Artificial Breeding in Vermont

Louis Augustus Resi, B.S. (UVM), 1949

Thesis: The Effects of Residual Amounts of Mastitis Curatives in Milk on the Activity of Starters in Cheesemaking

BOTANY

William Wallace Scott, B.A. (UVM), 1948

Thesis: A Fungus, *Valsa Leucostomoides* Peck, as the Cause of Decay and Discoloration in Tapped Sugar Maples

BIOCHEMISTRY

*Pincus Peyser, B.A. (Yeshiva College), 1945

Thesis: The Effect of Epinephrine on the Intermediary Metabolites of Glycolysis in Cardiac Tissue

CHEMISTRY

Donald Edward Fornwalt, B.S. (Albright), 1948

Thesis: The Heat Capacity of Nickel Oxide as Determined by Cooling Rates

Bethel Wyckliffe Johnson, B.S. (Citadel), 1948

Thesis: The Attempted Measurement of the Internal Surface Area of a Catalyst

* As of October 15, 1949. † As of February 18, 1950.

Alice Robertson Peabody, A.B. (Vassar), 1946

Thesis: The Preparation of Di- and Trisubstituted Guanidines from the 2-Aminopicolines

Howard Leon Plant, B.S. in Chem. (UVM), 1940

Thesis: The Preparation and Characterization of Certain Nuclear Substituted Ortho Thiocresols

William Joseph Plant, B.S. (Trinity), 1948

Thesis: The Hydrogenesis of Certain Thioethers by Raney Nickel Catalyst

Donald Edward Weiman, B.S. in Chem. (Lebanon Valley College), 1948

Thesis: The Oxidation of Certain Aryl Trityl Sulfides Using Superoxol

ECONOMICS

Robert Kenneth Griffin, B.S. (Notre Dame), 1945

Thesis: The Influence of Communism on the American Labor Movement

Amanda Zardecki Shuttleworth, B.S. (UVM), 1946

Thesis: An Analysis of the Taft-Hartley Act

FORESTRY

Robert Bruce Shannon, B.S. in For. (Penn. State), 1948

Thesis: The Management of a Vermont Farm Woodlot Through Integrated Utilization and Marketing

ZOOLOGY

Frances Ruth Watson, B.A. (UVM), 1948

Thesis: Some Photoreflexometer Tests Employing Anti-Agouti Serum Produced in Cocks

Herbert White, A.B. (Boston Univ.), 1948

Thesis: A Photoreflexometer Study of the Serological Relationships of Some Orders of Mammals to the Perissodactyla

THE COLLEGE OF MEDICINE

DOCTORS OF MEDICINE

Mary Louise Bertucio, A.B., *cum laude*,
Springfield, Mass.

Mary Patricia Brayton, B.S., Poultney
Allan Bandes Carter, A.B., *cum laude*,
Burlington

Pauline Elizabeth Clarke, A.B., Fairfield,
Conn.

Roger William Cooper, A.B., Northfield

Peter Stanley Czachor, B.S., Rutland

Olive Morris Davies, A.B., Poultney

Simon Dorfman, Biddeford, Me.

Charles Francis Drake, Elmhurst, Ill.

Elizabeth Fannie Drake, B.S., *cum laude*,
Middlebury

Peter Floreal Esteran, B.S., Barre

Louis Fishman, B.S., Burlington

Edward Esau Friedman, A.B., Newport,
R. I.

Norman Oscar Gauvreau, B.S., Burling-
ton

Jack Jay Goldman, A.B., Burlington

Karl Kenneth Grubaugh, A.B., M.A.,
Burlington

Philip Ross Hastings, B.S., Bradford

Joel Thomas Janvier, A.B., Mariposa,
Calif.

Gerald Joseph Jerry, A.B., Winooski

Llewellyn Martin Jones, A.B., *cum laude*,
Swanton

Harry Philip Levine, B.S., M.S., *cum*
laude, Burlington

Julian Levine, B.S., Burlington

Degrees Awarded

233

Gerald Francis McGinniss, A.B., Burlington
Jane Frances McNeill, A.B., Beacon, N. Y.
Richard Charles Manjoney, B.S., Bridgeport, Conn.
Charles Frederick Miller, Erie, Pa.
Leo Albert Moreau, B.S., Taunton, Mass.
Robert James Moriarty, B.S., Burlington
Carmen Mary Pallotta, B.S., Ludlow
Lawrence James Parker, Poughkeepsie

Alfred Edward Peterson, A.B., Upper Montclair, N. J.
Albert Adelard Poulin, Jr., B.S., Rumford, Me.
Howard Simon Stein, A.B., Brooklyn, N. Y.
Marjorie Joy Topkins, A.B., Brooklyn, N. Y.
Vita Vileisies, Naugatuck, Conn.
Emanuel Wiedman, B.S., Burlington

DEGREES HONORIS CAUSA

Mary Hanson Bailey, St. Johnsbury, Master of Arts
Henry Bigelow Oatley, New York City, Doctor of Engineering
Stephen Albert Freeman, Middlebury, Doctor of Humane Letters
Levi Pease Smith, Burlington, Doctor of Laws
John Redwood Fisher, Arlington, Doctor of Laws
Elias Lyman, North Ferrisburg, Doctor of Laws

SPECIAL HONORS

POLITICAL SCIENCE

Emerson James Melaven '50

Thesis: A Study of the Effects of Third Party Movements on Major Party Platforms

ENGLISH

Lawrence Thomas Stoddard '50

Thesis: F. Scott Fitzgerald: A Study in Damnation

COMMISSIONS OF SECOND LIEUTENANT IN THE REGULAR ARMY OF THE UNITED STATES

*Elmer Clark Martin, RA, Corps of Engineers

*Harry Robert Ross, RA, Quartermaster Corps

COMMISSIONS OF SECOND LIEUTENANT IN THE ORGANIZED RESERVE CORPS, UNITED STATES ARMY RESERVE

John Goldthwaite Adams, Jr., Infantry—USAR

Robert Andrea Billhardt, Jr., Infantry—USAR

Ernest Joseph Belair, Infantry—USAR

Daniel Barnett Burke, Infantry—USAR

Edwin Howard Bickford, Infantry—USAR

*William Joseph Buzzell, Infantry—USAR

*Distinguished Military Graduate.

- Charles Merritt Carlton, Infantry—
USAR
William Joseph Carpenter, Quartermaster
Corps—USAR
*Richard Victor Casavant, Infantry—
USAR
Albert Allen Cole, Jr., Ordnance Dept.—
USAR
*Edward Joseph Comolli, Infantry—
USAR
*Newell Hill Curtiss, Jr., Infantry—
USAR
Andrew Jackson Davis, Signal Corps—
USAR
John Arthur Ferwerda, Infantry—USAR
Bailey Herman Goldberg, Infantry—
USAR
Arnold George Grant, Quartermaster
Corps—USAR
Hubert Lewis Higgins, Infantry—USAR
*Jack Keeler Hinman, Infantry—USAR
Edwin John Hryckiewicz, Ordnance
Dept.—USAR
John Henry Hudson, Infantry—USAR
Robert Charles Ianni, Infantry—USAR
Wilmot Wheeler Irish, Infantry—USAR
James Robert Jennings, Jr., Armed Caval-
ry—USAR
William Charles Kerin, Quartermaster
Corps—USAR
*Frederick William King, Infantry—
USAR
Wallace David Lash, Quartermaster
Corps—USAR
Damas Jerome Limoge, Infantry—USAR
*Robert William Looby, Infantry—USAR
John Endicott Lovell, Ordnance Dept.—
USAR
Ian Roderick Macneil, Infantry—USAR
James Clive McNulty, Ordnance Dept.—
USAR
*Leonard Smith Mercia, Infantry—USAR
Norman Moore, Infantry—USAR
Elbert Dickerson Nostrand, Infantry—
USAR
*Dominic Richard Paul, Infantry—USAR
John Robert Price, Infantry—USAR
Earle Darwood Randall, Infantry—USAR
William Patrick Ryan, Jr., Infantry—
USAR
Ralph Warner Simonds, Quartermaster
Corps—USAR
*John Charles Steinmetz, Infantry—
USAR
*Edward Saul Struhl, Quartermaster
Corps—USAR
William Horace Towne, Infantry—USAR
Anthony Trono, Infantry—USAR
Charles Julian Wilcox, Infantry—USAR

PRIZES

THE GEORGE H. WALKER DAIRY PRIZE

For Conspicuous Merit in Dairy Husbandry Studies and Character
Joseph Frank Metz, Jr., '50

THE ELWIN L. INGALLS 4-H PRIZE

*In Honor of Elwin L. Ingalls, for Outstanding Merit in 4-H Club Work, Character,
and Scholarship*
Edwin Howard Bickford '50

THE SEYMOUR HORTICULTURAL PRIZE

*For the Best Work in Original Horticultural Research by a Member of the Senior
Class*
Ursula Hirsch '50

BURPEE AWARD IN HORTICULTURE

*Awarded on the Basis of Scholarship, Practical Experience, and Interest in Flower
and Vegetable Growing*
Betsy Bigelow Bouton '50

*Distinguished Military Graduate.

THE GERMAN LITERARY PRIZE

Awarded by the Goethe Lodge of Burlington for General Excellence in German
Maynard Joseph North '50

THE EDWARD PAGE BUTLER DEBATING PRIZES

Awarded for Proficiency in Debate

First: Mary Ellen Fuller '51

Third: Margaret Ann Fisher '51

Second: Pauline Joyce Westcott '51

THE ROBERT ASHTON LAWRENCE DEBATING PRIZES

Awarded for Proficiency in Debate

First: Thomas Lawlor Hayes '50

Third: Morris Joseph Levin '50

Second: Richard Thomas O'Connell '50

Ian Roderick Macneil '50

THE ROBERT ASHTON LAWRENCE AND GEORGE EDWIN LAWRENCE DEBATING PRIZES

Awarded for Proficiency in Debate

Second: Richard Thomas O'Connell '50

Third: Thomas Lawlor Hayes '50

THE HANNAH G. SOLOMON PRIZE

Awarded by the Burlington Section of the National Council of Jewish Women to the Senior Women Who Have Exhibited in the Highest Degree the Qualities of Scholarship, Leadership, and Service

Joan Ediff '50

Marion Rae MacTiernan '50

THE B'NAI B'RITH PRIZE

Awarded by the Joseph Frank Lodge of Burlington to That Student Who Has Done Most to Encourage Interfaith Cooperation and Activities

David Sowle Newhall '51

THE A. ATWATER KENT PRIZE

Given in Electrical Engineering for Progress in Judgment, Development of Personality and Promise of Success

James Francis Vize '50

PHELPS PRIZE

Awarded in Civil Engineering for Conspicuous Merit in Professional Studies, and High and Noble Traits in Personal Character

William Henry Viets '50

THE FRED T. KIDDER MEDAL

Awarded for Character, Leadership, and Scholarship

John Lincoln Ballard '50

THE WASSON ATHLETIC PRIZE

In Memory of Dr. Watson L. Wasson '01 for Scholarship and Athletic Attainment

John Lincoln Ballard '50

THE ATHLETIC COUNCIL MANAGERIAL PRIZE

Awarded to That Major Sport Manager Deemed Most Proficient

Morris Joseph Levin '50

Donald Walker Smith '50

CARBEE MEDICAL PRIZE

To the Student in the College of Medicine Who Shows the Greatest Proficiency in the Subject of Obstetrics

Mary Louise Bertuccio, A.B., '50

WOODBURY PRIZES IN MEDICINE

For the Greatest Proficiency in Clinical Work in Senior Year

Elizabeth Fannie Drake, B.S., '50

To the Sophomore Having the Highest Standing for Two Years of Medical Work

Theodore Herzel Goldberg, A.B.

NU SIGMA NU MERIT AWARD

To the Outstanding Student in the Junior Class of the Medical College

Murdo Glenn MacDonald, B.S., '51

LAMB FOUNDATION PRIZES

To the Students Showing Greatest Comprehension and Appreciation of the Doctor-Patient Relationship

First: Allan Bandes Carter, A.B., '50

Third: Lawrence James Parker '50

Second: Julian Levine, B.S., '50

EMERSON PRIZE IN HISTORY

In Memory of Professor Samuel Franklin Emerson

Anna Marie Olson '50

EDMUND F. LITTLE CUP

Awarded for Excellence in Mechanic Arts

Robert Edward Edminster '50

The Alumni Council

This organization was formed May 1, 1920.

The object of the Council is to advance the interest, influence, and efficiency of the University of Vermont; to strengthen the relations between the alumni and the University; to encourage sufficient class organization; to keep the public informed in regard to the University; to keep before the various preparatory schools of the country the advantages of the University of Vermont as an educational institution; to aid and assist in the establishment of alumni associations and promote their interests; to report from time to time to the Board of Trustees of the University any facts and recommendations by the Council deemed material or for the interests of the University; to act as a medium that may make known the ideas of the alumni to the University, and wishes of the University to the alumni; to keep in touch with the undergraduate activities, and to act in an advisory capacity through the Executive Committee and office of Alumni Council to such of the undergraduates as may desire to consult it in reference to their occupations after graduation, and for that purpose to keep in as close a touch as possible with the demands of the country's professional, business and industrial needs.

The Alumni Council is composed of one member from each of the fifty classes last graduated, one member from each active alumni club and twenty members at large, one-half of such members at large being women.

PRESIDENT—Elias Lyman, North Ferrisburg, Vt.

SECRETARY—Isabelle Y. Gallup, 530 North St., Burlington, Vt.

ALUMNI OFFICE—Waterman Building, Burlington, Vt.

Chairman of Finance Committee: David W. Webster, 31 Cliff St., Burlington, Vt.

Co-Chairmen of Commencement: John H. Sutor, '38, Deerfield, Mass., and Thomas D. Cook, '25, 101 Robinson Pkwy., Burlington, Vt.

Chairman of Undergraduate Activities: Lyman S. Rowell, '25, 38 Cliff St., Burlington, Vt.

Chairman of Scholarship Committee: Willis R. Buck, '17, 414 Colchester Ave., Burlington, Vt.

Ex-Officio: William M. Lockwood, '27, 273 S. Prospect St., Burlington, Vt.; Lawrence F. Killick, '22, 10 Greene St., Burlington, Vt.; Frederick S. Harris, '22, 29 Colony St., Meriden, Conn.; Harold C. Collins, '28, 127 Mansfield Ave., Burlington, Vt.

Athletic Council: Lawrence F. Killick, '22; John W. Goss, '10; Loren F. Palmer, '29; Robert P. Lawton, '37.

Honorary Members:

President William S. Carlson, 25 Colchester Ave., Burlington, Vt.;
Dr. Clarence H. Beecher, '00, 151 Robinson Pkwy., Burlington, Vt.

CLASS REPRESENTATIVES

- 1901 Samuel S. Dennis, 129 Corey Ave., West Roxbury, Mass.
- 1902 Alice H. Derby, 40 Robinson Pkwy., Burlington, Vt.
- 1903 Harold J. Adams, 705 Walbridge Bldg., Buffalo, N. Y.
- 1904 Elmer E. Gove, Shelburne Rd., Burlington, Vt.
- 1905 Kathryn M. Coventry, 312 So. Winooski Ave., Burlington, Vt.
- 1906 Mrs. Ruth Bond Gray, 41-B University Heights, Burlington, Vt.
- 1907 Martin Hervey Rice, 77 Ledge Rd., Burlington, Vt.
- 1908 William L. Blanchard, 89 Walton Park, Melrose Highlands, Mass.
- 1909 William L. Gardner, 17 Overlake Park, Burlington, Vt.
- 1910 Albert Valentine Kieslich, 167 North Ave., Burlington, Vt.
- 1911 Dr. Robert Leland Maynard, 289 College St., Burlington, Vt.
- 1912 Albert L. Gutterson, 49 Cherry Hill, Springfield, Vt.
- 1913 Charles P. Smith, Jr., Appletree Point, Burlington, Vt.
- 1914 Harold F. Johnson, 60 Hopkins Pl., Longmeadow, Mass.
- 1915 Joseph B. Johnson, 1 Hillcrest Rd., Springfield, Vt.
- 1916 Morris R. Wilcox, 152 Lyman Ave., Burlington, Vt.
- 1917 Henry T. Way, Porter Screen Co., Winooski, Vt.
- 1918 George C. Stanley, 86 Loomis St., Burlington, Vt.
- 1919 Herbert D. Pearl, 154 Summit St., Burlington, Vt.
- 1920 Dr. Peter P. Lawlor, 65 Pine St., Burlington, Vt.
- 1921 Mrs. Ruth Harrington Lane, 47 Hillcrest Rd., Burlington, Vt.
- 1922 Lawrence F. Killick, 10 Greene St., Burlington, Vt.
- 1923 Wesley W. Smith, Jr., Middlebury, Vt.
- 1924 Daniel B. Dyer, Essex Junction, Vt.
- 1925 Leon D. Latham, Jr., 112 Bradley Rd., Burlington, Vt.
- 1926 Olney W. Hill, 539 St. Paul St., Burlington, Vt.
- 1927 Charles B. Finnegan, 213 Shelburne Rd., Burlington, Vt.
- 1928 Kenneth H. Gurney, 50 Hillcrest Rd., Burlington, Vt.
- 1929 Constans M. Holden, 257 So. Union St., Burlington, Vt.
- 1930 Mrs. Julia Waterman Jay, 441 So. Union St., Burlington, Vt.
- 1931 John A. Bradish, Williston, Vt.
- 1932 James W. Marvin, South Burlington, Vt.
- 1933 Merrill E. Agel, 401 North St., Burlington, Vt.
- 1934 John C. Arnold, Jr., 420 So. Winooski Ave., Burlington, Vt.
- 1935 Donald C. Gregg, 35 So. Converse Hall, U.V.M., Burlington, Vt.

- 1936 Robert C. Bristol, 40 Mayfair Pk., South Burlington, Vt.
- 1937 Donald H. Tetzlaff, 30 Park St., Barre, Vt.
- 1938 Albert C. Spaulding, III, East O'Lake, Burlington, Vt.
- 1939 Mrs. Martha Douglass Peterson, 142 N. Church St., Rutland, Vt.
- 1940 Florence I. Wade, 38 So. Union St., Burlington, Vt.
- 1941 Mrs. Dorothea Smith Hanna, Appletree Point, Burlington, Vt.
- 1942 William P. Leamy, 27 School Street., Burlington, Vt.
- 1943 Paul N. Sutton, 140 Summit St., Burlington, Vt.
- 1944 James P. Irish, R. D. 2, Milton, Vt.
- 1945 Mrs. Harriet Pearl Grant, 156 Summit St., Burlington, Vt.
- 1946 John K. Holden, Rock Point, Burlington, Vt.
- 1947 Keith W. Calkins, 1122 Greenwood Rd., Brooklyn, N. Y.
- 1948 Philip E. Robinson, 1246 So. Taylor St., Arlington, Va.
- 1949 Mitchell J. Hunt, West Chester, Pa.
- 1950 Franklin M. Peabody, 522 E. State St., Ithaca, N. Y.
- 1951 Edward F. Streeter, 381 Main St., Burlington, Vt.
- 1952 Harold F. Henningsen, 170 Spruce St., Burlington, Vt.

MEMBERS-AT-LARGE

Term Expires 1951

- Mrs. Gwynneth Jones Aiken, '37, 44 University Terr., Burlington, Vt.
- Thomas J. Mulcare, '09, 414 Mt. Auburn St., Cambridge, Mass.
- Mrs. Carolyn Chamberlain Briggs, '18, 82 Overlake Pk., Burlington, Vt.
- Fred B. Wright, '05, Cliff Pl., Pelham 65, N. Y.

Term Expires 1952

- Leon W. Dean, '15, 308 So. Prospect St., Burlington, Vt.
- H. Marian Way, '23, 115 Summit St., Burlington, Vt.
- Jerome H. Farwell, '33, 370 Maple St., Burlington, Vt.
- Harold W. Marsett, 3 McKinley St., Montpelier, Vt.

Term Expires 1953

- Dr. W. Andrew R. Chapin, 40 Riverview Terr., Springfield 8, Mass.
- John W. Goss, 77 Ledge Rd., Burlington, Vt.
- Rev. Robert F. Joyce, St. Peter's Church, Rutland, Vt.
- Lyman S. Rowell, 38 Cliff St., Burlington, Vt.

Term Expires 1954

- Willis R. Buck, '19, 414 Colchester Ave., Burlington, Vt.
- Raymond E. Holway, '25, Box 347, Rutland, Vt.
- Mrs. Eleanor Lockwood Nowlin, '28, 242 So. Winooski Ave., Burlington, Vt.
- Frederick W. Shepardson, '12, 101 Ledge Rd., Burlington, Vt.

Term Expires 1955

David W. Howe, '14, 385 So. Prospect St., Burlington, Vt.
Mary Jean Simpson, '13, 61 No. Prospect St., Burlington, Vt.
Harris W. Soule, '22, 308 Main St., Burlington, Vt.
Mrs. Lillian Cohen Samuelson, '30, Spear St., Burlington, Vt.

CLUB REPRESENTATIVES

Out-of-State

Boston, Mass.—Henry Semans, '24, 227 Callendar St., Dorchester, Mass.
Buffalo (Western N. Y.)—Chas. F. Blair, '99, 810 White Bldg., Buffalo, N. Y.
California—Arthur E. Lovett, '00, 1113 Marengo Ave., So. Pasadena, Calif.
Chicago, Ill.—Harold C. Carter, '25, 242 Columbia Ave., Park Ridge, Ill.
Cleveland, Ohio—Earle W. Brailey, '14, 19201 So. Moreland Blvd., USSN Sta., Cleveland 22, Ohio.
Detroit, Mich.—Edward D. Trowbridge, '26, 722 Notre Dame, Grosse Point 30, Mich.
Hartford, Conn., Alumnae—Mrs. Lucy Eaton Ellis, 263 Brimfield St., Wethersfield, Conn.
Hartford, Conn. Alumni—Jas. H. Naylor, Jr., '37, Rt. 3, Rockville, Conn.
Hampshire County, Mass.—James P. Reed, '10, 125 Russell St., Hadley, Mass.
New York Alumni—J. Howard Moore, '14, 9 East 38th St., New York, N. Y.
New York Medical Alumni—Dr. Allen M. Margold, '25, 148 East Ave., Norwalk, Conn.
New York Capital District—Dr. Arthur Q. Penta, '25, 1301 Union St., Schenectady 8, N. Y.
Philadelphia, Pa.—Mrs. Ruth Blodgett Doolin, '23, 1364 Indian Creek Dr., Philadelphia, Pa.
Pittsburgh, Pa.—Harold E. Hazen, '24, 435 Avenue D, Pittsburgh 21, Pa.
Rochester, N. Y.—Arthur B. Corey, 155 Summit Dr., Rochester, N. Y.

Springfield, Mass.—Raymond G. Kinsler, 409 Trafton Rd., Springfield, Mass.

Washington, D. C.—O'Neil Tolman, '26, 1025 Connecticut Ave., N.W., Washington, D. C.

Worcester, Mass.—G. Stanley Flagg, '32, 4 Robert Ave., Auburn, Mass.

Vermont

Addison County—Arthur B. Delano, '11, Shoreham, Vt.

Burlington Alumni—Raymond A. Briggs, '18, 82 Overlake Park, Burlington, Vt.

Burlington Alumnae—Mary O. Boynton, '94, 31 So. Prospect St., Burlington, Vt.

U. V. M. Medical—Dr. John C. Cunningham, '35, Billodeau Ct., Burlington, Vt.

Caledonia County—James B. Campbell, '09, 15 Summer St., St. Johnsbury, Vt.

Bennington County—Walter C. Wood, '16, 317 Washington Ave., Bennington, Vt.

Franklin and Grand Isle Counties—Robert W. Ready, '24, Franklin Co. Savings Bank Bldg., St. Albans, Vt.

Lamoille County—Mrs. Priscilla S. Davison, '23, Morrisville, Vt.

Orleans and Essex Counties—Roger D. Whitcomb, '38, 10 Maple St., Newport, Vt.

Rutland County—Chester B. Eaton, '34, 141 Ash St., Rutland, Vt.

Washington County (Orange, Williamstown and Washington), Fletcher B. Joslin, '34, Waitsfield, Vt.

Windsor County—Philip W. Noyes, '37, 117 Main St., Ludlow, Vt.

Appendix

Loan Funds, Scholarships, and Prizes

LOAN FUNDS

THE AMERICAN AGRICULTURIST RESEARCH FOUNDATION LOAN FUND, amounting to five hundred and fifty dollars, is available to Juniors and Seniors in Home Economics on recommendation of the Dean of the College of Agriculture.

THE BARNES FUND, established by bequest of Rev. Stephen G. Barnes, provides limited assistance to needy students who wish to attend inspirational religious conferences. The income of the one thousand dollar endowment is available as a loan or gift.

THE CHARLES H. BAYLEY LOAN FUND, amounting to ten thousand dollars, was established in 1937 and increased in 1939 by gifts of Laura Morse Bayley in memory of her husband.

THE JOHN H. AND MARY A. BLODGETT LOAN FUND, amounting to forty-seven thousand dollars, was established in 1938 by bequest of Mary A. Blodgett of Bellows Falls. It is loaned to worthy Vermont boys and girls, enrolled in any curriculum offered by the University. Preference is given to graduates of the Kurn Hattin and Warner Memorial Homes of Westminster and Saxtons River and to students who are residents of the town of Rockingham. The interest rate is four per cent during college residence and for one year after leaving, and five per cent thereafter until the loan is repaid, subject, however, to modification in particular instances at the discretion of the Student Aid Committee.

THE CARBEE LOAN FUND of four thousand dollars was established by Mrs. May D. Carbee of Haverhill, N. H., in memory of her husband, Moses Dyer Carbee, M.D., of the Class of 1873. This fund is to be loaned to deserving students of the College of Medicine.

THE CHAPMAN LOAN FUND, established in 1950 by the bequest of Elizabeth Chapman of Cambridge, Mass., provides that the income from approximately thirty thousand dollars be loaned to deserving students.

THE CLASS OF 1923 LOAN FUND, amounting to four hundred dollars, is available to students in the academic colleges.

THE CLASS OF 1929 LOAN FUND, established in 1936, is loaned to students of the academic colleges. The fund amounts to more than seven hundred dollars.

THE CONSOLIDATED LOAN FUND is made up of the Class of 1924 Fund, the Class of 1925 Fund, the Emergency Loan Fund, the Julia I. Bates Fund, the Student Loan Fund, the B. F. Taylor Fund, the New York Alumni Fund of November, 1927, the Edmund Seymour Fund, the Kidder Loan Fund and the Lydia M. Blood Loan Fund. These consolidated funds amount to more than twenty thousand dollars.

THE LEONARD PERLEY DICKINSON LOAN FUND is available to deserving students who are pursuing a course leading to a bachelor's degree in Engineering. Preference is to be given students pursuing the Electrical Engineering Course. This loan fund amounts to approximately seven thousand dollars.

THE ANNETTE FISKE MERENESS LOAN FUND is for the benefit of women students. The fund amounts to more than twelve thousand dollars.

THE ASA FISKE LOAN FUND was established by Annette Fiske Mereness in memory of her father. It amounts to seven thousand two hundred dollars and is available to young women.

THE MARY GRAVES LOAN FUND amounting to six thousand nine hundred dollars is available as a loan fund for women. It is the gift of Annette Fiske Mereness, in memory of her mother.

THE JOSEPH LAWRENCE HILLS LOAN FUND, established by friends of Dean Hills, who completed fifty years of service to the University in 1937, now amounts to over two thousand dollars.

THE STEPHEN DWIGHT AND LIDA MASON HODGE LOAN FUND, amounting to more than three thousand dollars, may be loaned under certain conditions to deserving women students enrolled in the College of Arts and Sciences.

THE JEDEVINE FUND was established by Allen E. Jeudevine as a memorial to his son, Cornelius A. Jeudevine, who died before his plan of entering college was realized. This fund is to aid poor and deserving young men in Vermont in obtaining a liberal education. The fund now amounts to more than thirty-two thousand dollars.

CHARLES S. AND ETTA M. KEHOE LOAN FUND, to be loaned to deserving students, subject to such regulations as the Board of Trustees shall prescribe, amounts to eight thousand two hundred dollars.

THE LADIES OF THE FACULTY LOAN FUND, amounting to eight hundred ninety dollars, is available to deserving and needy girls. The awards are made by a committee of the Ladies of the Faculty. Not more than fifty dollars is loaned to any one girl.

THE LONDON FUND was established by Susan W. Landon in memory of her brother, Sealand W. Landon of the Class of 1874, for many years a well-known school principal. This fund, amounting to more than ten thousand dollars, is loaned to deserving men and women.

THE DR. JOSEPH E. LUMBARD LOAN FUND, amounting to more than one thousand dollars, was established in 1946 by the gift of Mr. J. Edward Lumbard, Jr. Loans are made to needy and deserving students in the College of Medicine.

THE MEDICAL COLLEGE LOAN FUND, established in 1933 by Medical College alumni and amounting to sixty-seven hundred dollars, is available for loans to students enrolled in the College of Medicine.

THE CHARLES D. AND CARRIE D. ORDWAY LOAN FUND was received as a bequest from Charles D. Ordway in 1933. It amounts to more than twenty-six thousand dollars and is available to Vermont students.

THE MARY MAUD PATRICK LOAN FUND, amounting to two hundred eighty-five dollars, was established by Epsilon Sigma as a memorial to Mary Maud Patrick for the benefit of students in elementary education.

THE PHI BETA KAPPA LOAN FUND of six hundred dollars is available to members of the senior class, preference being shown to applicants who are members of the society.

THE RIXFORD MANUFACTURING COMPANY LOAN FUND of five hundred dollars is available for students who are residents of the town of Highgate.

THE HENRY BIGELOW SHAW LOAN FUND, amounting to three thousand dollars, was established in 1938 by Mrs. Willard Pope in memory of her brother, Henry Bigelow Shaw of the class of 1896. The fund is loaned, under certain restrictions, to young men who have been graduated from the University and who wish to study at Harvard University Law School.

THE MARY A. SHAW AND FANNY E. SHAW LOAN FUND was established by Mrs. Willard Pope, daughter of Mary A. Shaw, for the benefit of women students of the University. The fund amounts to three thousand five hundred dollars.

THE F. H. AND GRACE M. SHEPARDSON FUND, amounting to approximately sixty-eight thousand dollars, is to be loaned to deserving students, subject to such regulations as the Board of Trustees shall prescribe.

THE STEVENS LOAN FUND, given in 1926 by relatives of Horace E. Stevens of the Class of 1870 in his memory, is available to students in Engineering. The fund amounts to two thousand dollars.

THE EMILY AND THOMAS TELFER LOAN FUND, established by Mrs. Thomas Telfer of Berkeley, California, amounts to twenty thousand dollars.

THE TERRILL-HOLBROOK LOAN FUND of about one thousand dollars is available for loan to women students, preference being shown to those registered in the Home Economics curriculum.

THE WOMEN'S STUDENT HEALTH COUNCIL LOAN FUND, amounting to about one thousand dollars, is loaned to women designated by the Dean of Women and the Director of the Department of Physical Education for Women, under special regulations as to interest and repayment.

SCHOLARSHIPS

THE LIZZIE P. ALLEN SCHOLARSHIPS, were founded in 1900 by Lizzie P. Allen, a descendant of Ira Allen, founder of the University.

THE ALUMNI MEMORIAL SCHOLARSHIP FUND, appropriated annually by the Executive Committee of the Alumni Council, provides scholarships for male students of the University who are deemed worthy, who are in need, and who meet the qualifications of sound scholarship, good character, outstanding leadership, and participation in student activities. The award is made on an annual basis upon the recommendation of the Alumni Council or a committee of the Alumni Council designated for that purpose. Each scholarship is named in memory of an alumnus.

THE FRANKLIN BALDWIN SCHOLARSHIP, established in 1915 by bequest of Mr. Baldwin, is available to students from Putney.

THE BARNARD SCHOLARSHIPS, were founded in 1903 by the bequest of Rev. Lucius E. Barnard of the Class of 1853.

THE REUBEN CLARK BENTON SCHOLARSHIPS, established under the will of Reuben Clark Benton, '54, of Minneapolis, Minn., native of Waterford, and a boyhood resident of Lunenburg, for the benefit of students from Waterford, Lunenburg, or Minneapolis.

THE ADA S. BLAIR FUND of two thousand five hundred dollars was established in 1926 by a bequest from Miss Blair.

THE BORDEN AGRICULTURAL SCHOLARSHIP of three hundred dollars is awarded annually to that eligible student in the College of Agriculture who on entering his senior year has the highest average grade of all eligible students in all preceding college work. Students who have included in their courses of study two or more dairy subjects are eligible for the award.

THE ELIZABETH F. BRIGHAM SCHOLARSHIPS, founded in 1910 by a bequest from Miss Brigham, are available first for students from Brigham Academy.

THE MARCIA P. BROWN SCHOLARSHIP, established by a bequest from Miss Brown is available to women students.

THE EMEROY N. BURRITT SCHOLARSHIP, a bequest from Miss Burritt, is used toward the tuition of a deserving young woman student.

THE SARAH L. BURRITT SCHOLARSHIP, a bequest from Miss Burritt, is used toward paying the tuition of a deserving young woman student.

THE EZRA HOYT BYINGTON SCHOLARSHIP, founded in 1905 in memory of Mr. Byington by a gift from Mrs. Louisa J. Byington, is for the benefit of students from Hinesburg or students bearing the name of Byington, Boynton, Hoyt, or Wortman, or in some way related to these families.

THE MOSES D. CARBEE SCHOLARSHIP, established by a bequest from Mrs. May D. Carbee of Haverhill, N. H., in memory of her husband, a graduate of the University in 1873, is available for medical students.

THE WALTER CARPENTER SCHOLARSHIP was established by a bequest of one thousand dollars from Dr. Walter Carpenter of Burlington. Preference is given to sons of clergymen and physicians.

THE CHAPMAN SCHOLARSHIP FUND, established in 1950 by the bequest of Elizabeth Chapman of Cambridge, Mass., provides that the income from fifty-eight thousand dollars be used for scholarships to qualified and deserving students.

THE CLASS OF 1861 SCHOLARSHIP, endowed and made available in 1891.

THE CLASS OF 1881 SCHOLARSHIP, endowed in 1937 by William H. Rice, a member of that class.

THE JOHN H. CONVERSE SCHOLARSHIP, founded in 1882, by John H. Converse, '61, of Philadelphia.

THE LIZZIE S. CONVERSE SCHOLARSHIP, founded by bequest of Sarah Elizabeth Converse of Burlington, for students in the Classical Department.

THE CRAFTSBURY SCHOLARSHIP, founded in 1900, for the benefit of relatives of Mr. and Mrs. Nathan S. Hill, or residents of Craftsbury or Isle La Motte.

THE PHILIP HENRY CREER SCHOLARSHIP, founded by Ex-Gov. Redfield Proctor for the benefit of students from Proctor, is awarded by the donor.

THE ESSO D-H SCHOLARSHIP of one hundred dollars is awarded each year to an incoming freshman in the College of Agriculture on the basis of need, character and scholastic ability, plus at least three years of 4-H work. If satisfactory grades are maintained, one hundred dollars per year will be paid the recipient for the four years.

THE EDWARD EVERETT HAWES FUND, founded in 1946 by bequest of Dr. Edward Everett Hawes of Hyannis, Mass., provides scholarship aid for medical students.

THE ALBERT T. HENDERSON SCHOLARSHIP was established in 1945 by a bequest from William J. Henderson in memory of his son.

THE FRANCIS WHELPLEY HICKOK SCHOLARSHIPS, were founded in 1902 by Mrs. Julia F. Hickok, widow of James W. Hickok of the Class of 1837, in memory of their son, a member of the Class of 1871.

THE CHARLES H. HOOD SCHOLARSHIPS of two hundred and fifty dollars each are given by the Charles H. Hood Dairy Foundation established by Dr. Charles H. Hood of Boston and are awarded by the Dean of the College of Agriculture. Six of the Hood Scholarships are available for the year 1950-51 to upperclass students whose major work is related to the farm production of milk. High scholastic standing is essential.

THE LOUISA H. HOWARD SCHOLARSHIPS, founded in 1882 by Miss Louisa H. Howard of Burlington, are available for men.

THE CHARLES A. HOYT SCHOLARSHIPS were founded in 1904 by a bequest from Mr. Hoyt, of the Class of 1858.

THE ISLE LA MOTTE SCHOLARSHIP was founded in 1884 by Nathan S. Hill of Burlington, for the benefit of students from Isle La Motte or from Craftsbury.

THE SARAH B. JACOBS SCHOLARSHIPS, founded in 1882 by Mrs. Sarah B. Jacobs of Boston, are available for graduates of Brigham Academy only.

THE EDITH BLANCHE KIDDER SCHOLARSHIPS were established by Joseph W. Kidder of Port Chester, N. Y., for students in the College of Medicine, preference being shown to legal residents of Barre.

THE ROBERT J. KIMBALL SCHOLARSHIP, founded in 1900 by Hon. Robert J. Kimball of Randolph, is for the benefit of the students from Randolph. The Trustees of Randolph High School may make nominations for this scholarship.

THE CELINDA A. B. LILLEY SCHOLARSHIPS were founded in 1880 by gifts from Mrs. Lilley for the benefit of women students.

THE LYNDON INSTITUTE SCHOLARSHIP, endowed by George E. P. Smith of the Class of 1897, is awarded annually to a graduate of Lyndon Institute nominated by the faculty of that school.

THE CHARLES MUNSON MARSH SCHOLARSHIP was founded in 1893 for the benefit of students from Woodstock, by bequest of Charles P. Marsh in memory of his son.

THE CHARLES P. MARSH SCHOLARSHIPS were founded in 1893 by bequest of Mr. Marsh for the benefit of worthy young men and women from Windsor County.

THE EDWIN WRIGHT MARSH SCHOLARSHIP, founded in 1883 by Charles P. Marsh of the Class of 1839, of Woodstock, in memory of his son of the Class of 1872, for the benefit of students from the town of Weathersfield or from Windsor County.

THE MARGARET PATTERSON MCDANIELS SCHOLARSHIP FUND was established in 1941 by a bequest of George N. McDaniels of Los Angeles, California, in memory of his mother. The scholarships derived from the income are for needy and deserving students, preference being shown to applicants who reside in the towns of Craftsbury and Greensboro.

THE MINER FUND was established in 1943 by a bequest from Daniel Pitkin Miner, the income to be used to provide for native-born students, not over twenty-one years of age and in need of aid, assistance in meeting tuition fees and other educational expenses in the University.

THE MORETOWN AND MIDDLESEX SCHOLARSHIPS were founded by the Rev. E. C. Bass, '59.

THE JUSTIN S. MORRILL SCHOLARSHIP, founded in 1900 by Senator Justin S. Morrill of Strafford, is for the benefit of students from Strafford.

THE NEW YORK ALUMNI ASSOCIATION SCHOLARSHIP of five hundred dollars is awarded to a male student from New York or vicinity. Three hundred dollars of this sum is given for tuition, the balance is loaned and bears a low rate of interest after the recipient has left College. This scholarship is awarded by a committee of the New York Alumni Association.

THE JOHN ORDRONAU SCHOLARSHIPS were founded in 1909 for the benefit of students in the Academic and Medical Colleges.

THE PARKER SCHOLARSHIP was founded in 1880 by Rev. Charles C. Parker, D.D., of the Class of 1841, in memory of himself and his son, Charles Edmund Parker, '67.

THE ARTHUR W. AND LOUISE S. PERKINS SCHOLARSHIP FUND was established in their memory in 1947 by their son and daughters. The income provides aid for a needy boy or girl of high character and reasonably good scholarship who is a graduate of a secondary school in Rutland. School authorities in Rutland are to be consulted regarding the qualifications of candidates who are not already enrolled in the University.

THE MINNIE A. PICKERING SCHOLARSHIPS were established in 1938 by a gift from Mrs. Minnie E. Pickering in memory of her daughter.

THE CHARLES W. RICH SCHOLARSHIP was founded in 1883 by Charles W. Rich of the Class of 1836 of St. Albans, for the benefit of students in the College of Arts and Sciences.

RUSSELL MILLER MILLING COMPANY SCHOLARSHIPS. Two annual educational scholarships of one hundred dollars each, known as the "Occident Flour 4-H Club Scholarships" are available to 4-H Club girls who have done high quality work in Home Economics projects for three years or more.

SEARS, ROEBUCK SCHOLARSHIPS, five of one hundred fifty dollars each, are awarded annually to incoming freshmen in Agriculture on the basis of need, character, and scholastic ability.

THE WILLIAM G. SHAW SCHOLARSHIP, originally founded in 1892 by bequest of one thousand dollars by Hon. William G. Shaw of Burlington, of the class of 1849, has since been increased by Mr. Shaw's daughter, Mrs. Willard Pope of Detroit, Mich., and is available for men students.

THE CHARLES D. SIAS SCHOLARSHIP FUND was established in 1943 by a bequest of fifteen thousand dollars from the estate of Charles D. Sias of Wenham, Mass., for the benefit of deserving young men.

THE SAMUEL SIDNEY SMITH SCHOLARSHIP was founded in 1896 by bequest of Mrs. Eliza Smith of Burlington in memory of her husband.

THE SOLDIERS' SCHOLARSHIP FUND was founded in 1913 by a group of Civil War veterans for the benefit of students who are descendants of soldiers in the Civil War.

THE SOPHIA STOW SCHOLARSHIPS, endowed in 1937 by bequest of George L. Stow, '73 in memory of his mother, are available to students of classical languages.

THE DANIEL WASHBURN SCHOLARSHIPS were founded in 1853 by Daniel Washburn, M.D., of Stowe, for the benefit of young men studying for the Christian ministry, or, in default of such applicants, of other deserving young men.

THE JOHN AND MARY WATERMAN SCHOLARSHIP endowed in 1923 by Charles W. Waterman of the Class of 1885 in memory of his father and mother, is available under special restrictions to residents of Waitfield or Denver, Colo. The scholarship is awarded by the President of the University.

THE WESTFORD SCHOLARSHIP, founded in 1882 by Luke P. Poland of St. Johnsbury, is available first to students from the town of Westford.

THE HATTIE LAURA WETHERBY WESTON SCHOLARSHIPS were founded in 1936 by the bequest of Mrs. Weston.

THE JOHN A. S. WHITE SCHOLARSHIP FUND was established by a bequest from John A. S. White of Northfield for the benefit of needy students from Washington County or from the State of Vermont.

WILBUR SCHOLARSHIPS. The University of Vermont Trust Fund, amounting to over one million dollars, was established by James B. Wilbur of Manchester as an endowment for scholarships for Vermont students who are in need of assistance to undertake college work and who have earned entrance or college records that indicate extraordinary scholastic ability. From the data presented in annual applications, tentative awards for the ensuing college year are made by the Trustees of the Trust on recommendation of the Committee on Student Aid and confirmed or denied in the middle of the year on the basis of the scholastic record of the previous semester. Preliminary statements concerning scholastic ability must be submitted with the request for an application blank.

THE WIRTHMORE 4-H SCHOLARSHIP of one hundred dollars is awarded annually to a 4-H member who has done outstanding work in 4-H dairy or dairy feeding projects and who enrolls as a freshman in the College of Agriculture. The selection is made by the 4-H leaders and the Dean's office.

THE CLAYTON J. WRIGHT SCHOLARSHIP was received by bequest from Mr. Wright and is available first for students from the town of Williston.

PRIZES

THE AMERICAN LEGION TROPHY, a mounted silver shield, is annually awarded to the Reserve Officers' Training Corps company which shows itself to be the most proficient in attendance, neatness, set-up, and drill. The designation of the winning organization and the name of the company commander of that organization are annually inscribed upon the shield. The shield was presented by Burlington Post, No. 2, of the American Legion.

THE ATHLETIC COUNCIL MANAGERIAL PRIZE of twenty-five dollars is awarded annually at Commencement to the senior sports manager who, in the judgment of the Athletic Council, has shown the greatest proficiency in performing the work of his office.

THE BENEDICT ESSAY PRIZE was established by Robert Dewey Benedict of the Class of 1848, who gave three hundred dollars for this purpose. From the income from this fund, a prize may be awarded annually to the member of the senior class who presents the best essay on the subject of "International Arbitration." The Department of Political Science determines whether or not the prize shall be awarded, and its decision is based upon the nature of the essay presented and the rating obtained in an oral examination thereon.

THE BENNETT ESSAY PRIZE is endowed by Philo Sherman Bennett of New Haven, Conn. From the income from the fund of four hundred dollars provided for this purpose, a prize may be awarded each year at commencement for the best essay "discussing the principles of free government." The Department of Political Science determines whether or not the prize shall be awarded, and its decision is based upon the nature of the essay presented and the rating obtained in an oral examination thereon.

THE B'NAI B'RITH PRIZE of twenty-five dollars is given annually by the Joseph Frank Lodge of Burlington to that student who in the opinion of the Committee on Religious Life has done most to encourage inter-faith cooperation and activities.

THE BURPEE AWARD IN HORTICULTURE, an annual award of one hundred dollars made possible by a grant from the W. Atlee Burpee Company, Seed Growers, of Philadelphia, Pa., and Clinton, Iowa, is made on the basis of scholarship, practical experience, and interest in flower and vegetable growing.

THE BUTLER DEBATING PRIZES were endowed by Edward Page Butler of the Class of 1870, who left one thousand two hundred dollars, the income to be used for the promotion of extemporaneous debate. From the

income of this fund three prizes may be awarded annually, on recommendation of the head of the Department of Speech, to the three women students who have shown the greatest ability in debate. The balance of the income, together with the amounts of any prizes that are not awarded, will be expended in furthering debating.

THE CARBEE MEDICAL PRIZE of three thousand dollars was established by Mrs. May D. Carbee, of Haverhill, N. H., in memory of her husband, Moses Dyer Carbee, M.D., of the Class of 1873. The income from the fund is given annually at Commencement to the student in the College of Medicine who shows the greatest proficiency in the subject of obstetrics.

THE CONVERSE PRIZES IN COMMERCE AND ECONOMICS were established by John Heman Converse of the Class of 1861, by gift of a fund of one thousand dollars, the income from which may be used in whole or in part for one, two, or three prizes. Any amount not awarded will be used for books and magazines for the Department of Commerce and Economics. The prizes are awarded on recommendation of the head of the department following presentation of a thesis of merit on some approved subject in the field of commerce and economics.

THE CRAIG TROPHY was donated to the University of Vermont by Major M. E. Craig, in honor of the 1936-1937 Rifle Team of the University of Vermont. Upon it is engraved each year the name of the man making the highest cumulative score throughout the year in the principal matches in which the University rifle team is a competitor. These competitions are The Hearst Trophy Match, The Corps Area Match and the matches in the New England League of the National Rifle Association. The award is announced annually by the Military Department. The trophy remains the property of the University of Vermont.

THE EMERSON PRIZE IN HISTORY is offered annually at Commencement in memory of Samuel Franklin Emerson, Professor of History for forty-two years. The prize is awarded to an undergraduate for the best original essay on any topic chosen from any field of history. Essays are not limited as to length but must be typewritten, double space, on white paper 8½ by 11 inches in size. Each essay is to be signed by a fictitious name, the identification of which must be given in an accompanying sealed envelope bearing on the outside the fictitious name which was used. All essays considered in the competition must reach the Department of History by April 15. The department will submit the best essays for a selection for award, to an outside judge, who may withhold the prize if no essay submitted reaches a sufficiently high standard.

THE GERMAN LITERARY PRIZE is awarded annually by the Goethe Lodge of Burlington for general excellence in German.

THE HOWARD PRIZES were provided by a bequest of one thousand two hundred and fifty dollars from Mrs. Hannah T. Howard of Burlington, the income of which is awarded in prizes to students in the College of Arts and Sciences for excellence in the work of the freshman year.

THE ELWIN LEROY INGALLS PRIZE is provided from a fund established in 1934 to honor Elwin Leroy Ingalls of the Class of 1896, who had then completed twenty years of continuous service as State 4-H Club Leader. It is awarded annually by the 4-H Club Department of the Vermont Extension Service to a University student of outstanding merit as shown in character, 4-H Club record, and scholastic attainment in college.

THE MABEL NELSON JACOBS SCHOLARSHIP CUP is annually awarded to the custody of that sorority, the members of which have won the highest scholastic standing for the preceding year. The cup was provided by Mrs. H. J. Nelson in memory of her daughter, Mrs. Mabel Nelson Jacobs of the Class of 1899.

THE KENT PRIZE IN ELECTRICAL ENGINEERING was established by A. Atwater Kent, of Philadelphia. The fund of five thousand dollars provides an income which is "awarded as a prize each year at Commencement to that member of the senior class in Electrical Engineering who, during his junior and senior years, in the opinion of the faculty teaching Electrical Engineering, has shown the greatest progress in judgment and general grasp of the broad principles of Electrical Engineering and in development of personality, and who shows the greatest promise of success in this field."

The names of the winners of this prize are placed on a tablet given by Mr. Kent and which is located in the Waterman Building.

THE KIDDER MEDAL is provided by the income of a fund of four hundred dollars, established in memory of Dr. F. T. Kidder of Woodstock, an alumnus of the Class of 1880 and a trustee of the University. The specially engraved gold medal is awarded at Commencement to the male student ranking first in character, leadership, and scholarship. The selection is made by a committee representing all the faculties.

THE LAWRENCE DEBATING PRIZES were established by Edwin Winship Lawrence, of the Class of 1901. The first group of prizes is established in memory of the donor's brother, Robert Ashton Lawrence, '99, and is offered annually to students who in the judgment of the Department of Speech exhibit the greatest proficiency in debate. The ten thousand dollar fund provides three annual prizes.

The second group of prizes, established in memory of the donor's brother, Robert Ashton Lawrence, '99, and his father, George Edwin Lawrence (Middlebury College '67), will be awarded to the three students participating in a joint debate between representatives of the University of Vermont and Middlebury College, who in the opinion of the judges chosen show the greatest proficiency in this debate. These prizes are derived from an endowment of five thousand dollars.

If debating ceases at the University, the income from these funds may be used to assist worthy students.

THE EDMUND F. LITTLE CUP is provided by the income from a fund established by Arlington P. Little, Class of 1901. It is awarded annually for meritorious work in mechanic arts.

THE LOYAL LEGION MEDAL is presented annually at Federal Inspection by the Vermont Commandery of the Military Order of the Loyal Legion to the most proficient junior cadet of the Reserve Officers' Training Corps.

THE NU SIGMA NU AWARDS are given annually in the College of Medicine to the outstanding students in the freshman and junior classes.

THE PHELPS PRIZE IN CIVIL ENGINEERING is derived from a fund of more than nine hundred dollars. It was endowed in memory of Edward Haight Phelps of the Class of 1872, by his father, Edward J. Phelps. The prize may be awarded by the Department of Civil Engineering each year at Commencement to a graduate of that year in Civil Engineering who has exhibited conspicuous merit in professional studies, and high and noble traits of personal character. A special certificate will accompany the prize, indicating the conditions upon which it has been awarded. In the event that no award is made in any year, the same amount of money will be expended in the purchase of books on the subject of Civil Engineering for the Library.

THE WADSWORTH RAMSEY-SMITH TROPHY AND PRIZE, in the amount of ten dollars, are awarded annually on Founder's Day to the outstanding senior cadet of the Reserve Officers' Training Corps. The name of the senior is inscribed on the trophy, a saber, which is maintained by the Military Department. This award is presented by Mrs. Wadsworth Ramsey-Smith, in honor of her husband, Colonel Ramsey-Smith.

THE WILLIAM S. ROSENBAUM MEMORIAL FOUNDATION AWARD in the amount of twenty-five dollars, sponsored by the Barbarossa Lodge, No. 133, Knights of Pythias, Philadelphia, Pa., is awarded annually for outstanding achievement in the field of Jewish studies.

THE SEYMOUR HORTICULTURAL FUND, amounting to twenty-five hundred dollars, was given by William W. Seymour in memory of his father, Henry E. Seymour of the Class of 1835. The income from the fund is used for the library and other expenses of the Horticultural Department, and for a prize to that member of the senior class who has done the best work in original horticultural research.

THE KIRBY FLOWER SMITH LATIN PRIZE is derived from a three thousand dollar fund established by his wife as a memorial to Kirby Flower Smith of the Class of 1884. An award is made annually to the student having the highest standing in second-year college Latin.

THE HANNAH G. SOLOMON PRIZE is awarded by the Burlington Section of the National Council of Jewish Women to the senior woman who has exhibited in the highest degree the qualities of scholarship, leadership, and service.

THE SONS OF THE AMERICAN REVOLUTION MEDALS have been presented annually since 1933 by the Vermont Society, Sons of the American Revolution, one to the member of each class in the Reserve Officers' Training Corps who is outstanding in character, conduct, leadership, and in theoretical and practical knowledge of the year's course. These medals are of nation-wide standard pattern. The stated purpose of the award is to keep before the minds of the young men of today, in order that they may be encouraged to exemplify them in practice, those qualities and characteristics upon which our nation was founded and has been perpetuated.

THE RUSSELL O. SUNDERLAND MEMORIAL TROPHY is awarded annually at Founder's Day to that man of the senior class who throughout his college course has best exemplified those qualities of character, leadership and persistence in overcoming obstacles, which were outstanding traits in the life of the late Russell O. Sunderland of the class of 1938. This is a permanent trophy upon which the name of the recipient is engraved annually. The Boulder Society gives a suitable personal trophy to each student who receives the Sunderland Award.

THE JOHN M. THOMAS TROPHY is awarded annually to that senior student who most closely exemplifies the character of John M. Thomas.

THE VETERANS OF FOREIGN WARS PLAQUE AND MEDAL are awarded annually at the Federal Inspection to the freshman cadet of the Reserve Officers' Training Corps who demonstrates the highest proficiency in leadership, drill, and military science. His name is inscribed upon the Veterans of Foreign Wars Plaque, which is maintained by the Military

Department. The medal and plaque are presented by the Howard Plant Post 782 of the Veterans of Foreign Wars.

THE GEORGE H. WALKER DAIRY PRIZE is derived from a permanent fund of two thousand dollars, donated by George H. Walker, Boston, Mass., one of the founders of the Walker-Gordon Milk Company. It is awarded annually by faculty vote to a member of the graduating class of the College of Agriculture who has pursued a course either in Dairy Production or Dairy Manufactures, and who has shown conspicuous ability in the studies pertaining to Dairy Husbandry, and especially in milk production and marketing, and who furthermore exhibits high and noble traits of character.

In the event that no award is made by the faculty in any given year this income is spent for apparatus to be used for instructional purposes in market milk making or distribution, or for books dealing with Animal or Dairy Husbandry. The apparatus or books are marked as being derived from the George H. Walker Prize Fund.

THE WASSON ATHLETIC PRIZE is derived from an endowment of two hundred and fifty dollars, given by Mrs. Pearl Randall Wasson in memory of her husband, Dr. Watson L. Wasson, '01. The income of the fund is used for the purpose of giving a prize "to the member of Senior class who has maintained the highest standard of academic scholarship and athletic attainment," as determined annually by the University Council.

THE WOODBURY MEDICAL PRIZES are derived from a fund of one thousand dollars created by Mrs. Pauline S. Woodbury in memory of her husband, Dr. Urban A. Woodbury of the Class of 1859. The first prize is awarded annually to the student who, upon graduation, has shown the greatest proficiency in the clinical subjects in his senior year. The second prize is awarded to that member of the sophomore class who has received the highest standing of the class in all subjects of the freshman and sophomore years.

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CALENDAR

SPRING SEMESTER, 1951

Enrollment January 29 and 30
Classes begin January 31
Wake Walk (no classes) February 23, 24
Spring Recess 11 a.m., March 31
through April 9
Founder's Day Convocation May 1
Memorial Day (holiday) May 30
Examinations May 23
through June 5
Commencement June 10

SUMMER SESSION, 1951

July 9 - August 18

FALL SEMESTER, 1951

Preliminary Days September 15-18
Enrollment (new students) September 19
Enrollment (all others) September 20
Classes begin September 21
Thanksgiving Recess 11 a.m., November 21
through November 25
Christmas Recess December 20
through January 2
Examinations January 18
through January 30

Inter-semester Recess January 31
through February 3

SPRING SEMESTER, 1952

Enrollment February 4 and 5
Classes begin February 6
Wake Walk (no classes) February 22, 23
Spring Recess 11 a.m., March 29
through April 7-
Founder's Day Convocation May 1
Memorial Day (holiday) May 30
Examinations May 28
through June 10
Commencement June 15



MAIN CAMPUS LOOKING EAST



THE IRA ALLEN CHAPEL AND BILLINGS LIBRARY

Calendar

1951

JULY

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