

1965-66

Adventure in Higher Learning

University of
Massachusetts
Bulletin



VOLUME LVII AUGUST, 1965 NUMBER IV

Published seven times a year by the University of Massachusetts in February, March (2), August, November (2), and December. Second class mail privileges authorized at Amherst, Massachusetts.

Cover sculpture: *Three Men with Bicycles* by Leonard DeLonga



Adventure
in
Higher
Learning
GENERAL
INFORMATION
BULLETIN
University of
Massachusetts

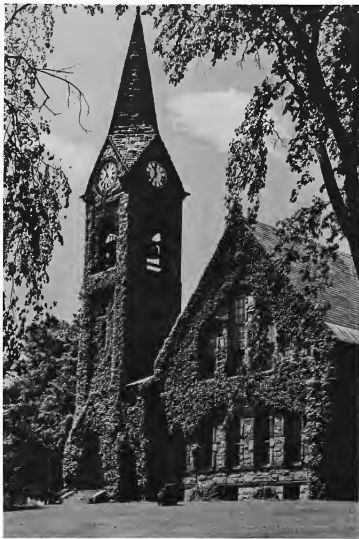


TABLE OF CONTENTS

A WORD FROM THE PRESIDENT	3
THE UNIVERSITY AND ITS CAMPUS	4
ADMISSION — HOW TO GET READY	4
WHAT IT COSTS TO ATTEND	6
A PLACE TO LIVE, TO WORK, TO LEARN	8
THE PROGRAM AND ITS OPPORTUNITIES	11
Agriculture	12
Arts and Sciences	14
Business Administration	16
Education	18
Engineering	20
Home Economics	22
Nursing	24
Physical Education	26
Public Health	28
Military and Air Science	29
COURSE REQUIREMENTS IN THE FRESHMAN YEAR	30
WHERE TO WRITE FOR FURTHER INFORMATION	32

A WORD FROM THE PRESIDENT

In the pages that follow, you will find the University of Massachusetts described as “a place to live, to work, to learn.” The University is, in other words, not only a place — but an opportunity. And the emphasis is on people, on teachers and students, on the men and women who contribute to and make our society what it is.

The full resources of the University are therefore always at the disposal of our students, whom we regard as the most important resource of all. And certainly if the young people we accept are to live, work and learn *well*, then we must be sure that they are *interested* and *dedicated* people, who will profitably and effectively participate in all that the University has to offer.

This is important, for the University itself is committed to serving national objectives in one of the most challenging eras of world history. We therefore see our students as integrally involved in helping our society to grow and to contribute in all significant ways to fulfilling these objectives.

In the process, students can derive enjoyment and satisfaction in the largest measure. The University has rich opportunities both in its curricular and extracurricular activities. Those who wisely balance their programs, who place studies first and carefully select other activities, can experience the “connection between knowledge and the zest of life” that is reflected in the program of all true universities.

Cordially,

A handwritten signature in cursive script that reads "John W. Lederle". The signature is written in dark ink and is positioned above the printed name and title.

JOHN W. LEDERLE
PRESIDENT

THE UNIVERSITY

The University of Massachusetts is the state university of the Commonwealth, founded in 1863 under provisions of the Morrill Land Grant Act passed by the United States Congress one year earlier.

The University is a member of the great community of Land Grant colleges and state universities serving the nation as principal resources of higher education for the country's citizenry. Incorporated as the Massachusetts Agricultural College in April, 1863, the institution was opened to a handful of students in 1867. Rooted in the liberal arts tradition (its early presidents were graduates of such colleges as Dartmouth, Williams, Amherst, and Harvard), it has grown steadily from the four teachers and four wooden buildings available for its opening session. Reflecting the broadening interests of its students, the General Court of the Commonwealth of Massachusetts authorized a second name, Massachusetts State College, in April, 1931. Sixteen years later, in May, 1947, the institution became the University of Massachusetts.

Situated in one of the most picturesque sections of the state, the University on its Amherst campus joins with its academic neighbors—Amherst, Smith, and Mount Holyoke Colleges—in maintaining the rich tradition of educational and cultural activity associated with this beautiful Connecticut Valley region. The University's campus in Amherst consists of approximately 950 acres of land and 110 buildings. These structures include classroom and laboratory facilities as well as dormitories and other units.

To augment the Commonwealth's facilities at the university level, the University of Massachusetts has planned and will open a campus in Boston at 100 Arlington Street in September, 1965. The new campus will offer educational programs comparable in quality to those available at Amherst, but will be a commuting institution. During the year 1965-66 the program will be largely at the freshman level as it is planned to expand the offerings by one class each year. Classes will be offered during the day, late afternoon and evening.

The total resources of the University of Massachusetts are dedicated to giving all qualified students full opportunities to develop their capabilities for service in a growing society.

ADMISSION -- HOW TO GET READY

The information given below applies to both the Amherst and the Boston campuses. For more detailed information regarding the University of Massachusetts-Boston, contact the Admissions Office located at 100 Arlington Street, Boston. (Tel. 542-6500).

Applications for admission may be obtained by writing the Admissions Office of the University. There is no application fee required at the University of Massachusetts. High School seniors are advised to file their applications early in the

senior year. Out-of-state and foreign applications must be received and completed prior to February 1st, for fall admission. College Board tests should be taken no later than the January testing date. If they are to be considered during the normal processing, in-state applications should be received and completed by March 1st. Qualified applicants are admitted at the beginning of the fall and spring semesters and at the beginning of the summer session.



Campus Scene.

All applicants for admission, except veterans, must take the Senior Scholastic Aptitude Test given by the College Entrance Examination Board. In addition, the University requires three College Board Achievement tests, including English Composition of every applicant whose scholastic record in grades 9 through 11 contains four or more grades below the college recommending mark of his high school. All postgraduate students and out-of-state students are also required to submit these three Achievement tests. All College Board test reports must be sent directly to the University from the College Board Testing Center. The applicant himself must notify the Board that he wishes his scores sent to this University. The Scholastic Aptitude Test may be taken on any of the scheduled dates, although the December testing date is preferred. The March and May dates are too late for seniors, but are appropriate for juniors taking the test for guidance purposes.

The University recognizes the importance of a first-hand acquaintance with the colleges a student may be considering, and hopes that he will find it possible to visit the campus for his own information and satisfaction. He should be assured, however, that it will not disadvantage his application if he is unable to do so. The University holds several Guest Days for high school seniors in the fall. These are particularly appropriate times to visit the campus and high schools are notified concerning them. An interview is, however, not part of the admissions procedure. It is physically impossible for the admissions staff to interview all applicants; therefore, personal conferences will be scheduled only if the candidate or his guidance counselor has a question which cannot be readily resolved by correspondence. At the Amherst campus, group interviews are scheduled for in-state candidates at 10:00 a.m., and at 11:00 a.m. for non-residents on Saturdays, excluding Holiday weekends, during the academic year. Guided tours will be available at the conclusion of each group interview.

Those interested in visiting the Boston campus should contact the Admissions Office at Boston. If it seems necessary to schedule an admissions counseling conference, it would be prudent for the applicant to make certain that his application and academic records have been received by the Admissions Office prior to his visit so that his situation may be discussed intelligently.

In most cases applicants will be notified by letter during April of the action taken on their applications. Applicants who present strong academic records, enthusiastic school recommendations, and satisfactory College Board scores will receive earlier notification. This early notification should reassure the well-qualified applicant regarding college entrance and enable the student who has selected the University as his choice of college to settle his plans. Applicants accepted at an early date, however, are under no pressure to make a final decision in regard to their choice of college before the Candidate's Reply Date. In this way the burden of multiple applications on high school guidance counselors and college admissions officers may be lessened.

High Ranking High School Juniors

Applicants who have completed with very high academic standing work through the junior year may be admitted to the University for the semester following the junior year. Such applicants must take the Scholastic Aptitude and three achievement tests given by the College Board in May of the junior year and compile scores satisfactory to the University. They must be highly recommended by their high school principal. The maturity and social adjustment of the applicant will be considered along with his intellectual development. Such applicants should apply before the end of the junior year.

Veterans

Veterans are not required to take the Scholastic Aptitude test. Instead, they must take entrance examinations in Algebra and English and a College Qualification test. These are administered by the University Testing Service in December, May and August. Information in regard to these tests will be furnished the veteran at the time he files his application for admission. Six months Active Duty for Training students are not considered veterans. They must take the College Board Scholastic Aptitude test rather than the Veterans' Examinations. Veterans in college or in full time postgraduate studies at present are considered in the same category as other applicants and do not take the Veterans Tests.

Bachelor of Vocational Agriculture Degree

Superior graduates of vocational schools of agriculture in Massachusetts and vocational agricultural departments in Massachusetts high schools may be accepted for the Degree of Bachelor of Vocational Agriculture, provided:

They are unqualifiedly recommended by the Vocational Division of the Department of Education as *bona fide* Vocational Graduates with superior ranks; they can present at least 16 units of certified entrance credits, approved as to quality and quantity by the State Department of Vocational Education; they successfully pass the English and College Qualification Test administered by the

University Guidance Office. Those who have had algebra will be required to include the algebra examination.

Transfers

A limited number of transfers from approved colleges may be admitted. Since applicants for such transfer exceed the number that can be accepted, they are placed on a competitive basis. Ratings will be based upon high school and college records and on the College Board Scholastic Aptitude Test, which is required of all transfers. Any student who has been previously enrolled in a college is considered a transfer and must file a transfer application form. Applicants for transfer should write the Registrar for a transfer application. At least 45 semester credits taken in residence at the University are required of all transfers who are candidates for the Bachelor's Degree.

✓ SUBJECT REQUIREMENTS

The subjects of preparatory study required for admission call for the satisfactory completion of a four-year high school course or its equivalent and are stated in terms of units. A unit is the equivalent of at least four recitations a week for a school year. High school graduation alone is not sufficient. The applicant's record must indicate capacity for handling the quality of scholastic work which the University has established as its standard of achievement.

Sixteen units of secondary school work must be offered, selected according to the following requirements:

College Preparatory Mathematics	3*
English	4
Foreign Language (2 years of 1 language)	2
U. S. History	1
Laboratory Science	1

The remaining units are elective and may be selected from the following subject matter:

- Mathematics
- Science
- Foreign Language
- History and Social Studies
- Free electives (not more than four units)

Free elective subjects are those not included in groups a-d, as for example: Music, art, drawing, typewriting, aeronautics, agriculture, home economics, etc. Such free electives are allowed in order that the student who wishes may have some opportunity to elect other high school offerings, while at the same time covering the fundamental requirements for college work.

Students planning to major in the physical sciences and mathematics should, if possible, offer two years of algebra, one of plane geometry, and one-half year of trigonometry. Analytical or solid geometry, chemistry, and physics, and an introduction to analytical geometry and calculus are also strongly recommended.

*Preferably two years of Algebra and one of Plane Geometry.

Students planning to pursue an engineering curriculum should offer two years of algebra, one of plane geometry, and one-half year each of trigonometry and solid geometry. Chemistry and physics are also advised. Those deficient in the mathematics should plan to cover it during the summer prior to entrance or expect to take five years to complete the college course.

Candidates who are deficient in any of the prescribed courses can be considered only if their over-all scholastic records indicate exceptional academic promise.

PHYSICAL EXAMINATION

Physical examination by their personal physician is required of all entering freshmen, re-entering students and all students participating in athletics. Physical report forms for this examination will be mailed to each student with the bill for the first semester and must be completed and returned to the University Health Service 10 days before the opening of the semester. Evidence of a successful smallpox vaccination and active tetanus immunization are required.

VETERANS' AFFAIRS

The Veterans' Coordinator is a staff member of the Placement and Financial Aid Services. All veteran affairs should clear through the Placement and Financial Aid Services.

Eligible dependents of veterans who are entering the University for the first time should have a Certificate of Eligibility at registration. This may be obtained from the nearest Veterans Administration office. Board, room, and fees must be paid in advance whether the student is enrolled under the G.I. Bill or not.

Veterans' dependents who are transferring to the University of Massachusetts from another institution or who have done summer work at another institution should present a supplemental Certificate of Eligibility at registration. This may be obtained through the veterans' office at the institution last attended.

WHAT IT COSTS TO ATTEND

AMHERST CAMPUS

Expenses vary from approximately \$1,250 to \$1,400 per year for the normally economical student. First year costs are usually greater than those of the other three years and there is less opportunity for earnings. Therefore, a student is advised to have a definite plan for meeting the expenses of the first year before entering.

The following estimate of a year's expenses, based chiefly upon last year's costs, includes only those items which are strictly university-related and does not include amounts for clothing, laundry, travel, etc. These costs vary slightly from year to year. Tuition for residents of Massachusetts is \$200 per year and for others \$600.

	<i>Normal</i>
Tuition (citizens of Massachusetts)	\$ 200.00
Room in University residence hall or private home (approx.)	300.00
Board at University dining halls	448.00*
Athletic Fee	30.00
Student Union Fee	20.00
Student Activity Tax (approx.)	28.00
Student Health Services Fee	40.00
Student Medical/Surgical Insurance, 12 months' coverage (optional)	18.00
Books, stationery, and other supplies (estimate)	150.00
	<hr/> \$1,234.00

INITIAL PAYMENT FOR FRESHMEN

The initial payment for first semester expenses required of freshmen at the time of fall registration is indicated below and is made up of the following items:

Tuition (citizens of Massachusetts)	\$ 100.00
Room rent in University residence halls (approx.)	150.00
Board at University dining halls	224.00*
Athletic Fee	15.00
Student Union Fee	10.00
Student Activity Tax (approx.)	14.00
Student Health Services Fee	20.00
Student Medical/Surgical Insurance, 12 months' coverage (optional)	18.00
Physical Education Equipment Fee (men only)	10.00
Books, stationery, and other supplies	100.00
	<hr/> \$ 661.00

These are only approximate figures. A bill will be rendered to the parent of each student prior to the beginning of the semester.

BOSTON CAMPUS

The expenses involved in attending the University of Massachusetts at Boston will be appreciably lower than those attending the University of Massachusetts at Amherst. The major difference is the cost for room and board; since the University of Massachusetts-Boston was created as a non-residential college, its students will be living and boarding at home or under other non-college arrangements.

*Above plan for 7 days; 5-day plan available for approximately \$370.00 per year or \$185.00 per semester.

Certain other expenses which are obligatory at the University of Massachusetts-Amherst are not required for University of Massachusetts-Boston students.

The following schedule of tuition and fees includes only those items which are strictly college and does not include amounts for clothing, laundry, travel, etc. Expenditures for books, stationery, and other supplies is estimated to be \$100 for all full-time students.

SCHEDULE OF ANNUAL TUITION AND FEES

	Full-time	Part-time
Tuition (citizens of Massachusetts)	\$200.00	\$100.00
Tuition (not citizens of Massachusetts)	600.00	300.00
Student Activities Fee	30.00	20.00
Student Medical/Surgical Insurance, 12 months coverage (optional)	30.00	30.00

The initial payment for first semester expenses required of freshmen at the time of fall registration, is \$145 for resident students and \$345 for non-resident students.

TUITION

As a state institution the University of Massachusetts offers a low rate of tuition to all students entering from the Commonwealth. Eligibility for admission under the low residential rate is determined in accordance with the following policy established by the Board of Trustees.

A student must present evidence satisfactory to the Treasurer of the University that his domicile is in the Commonwealth of Massachusetts in order to be considered eligible to register in the University as a resident student. This means that he must have established a "bona fide" residence in the Commonwealth with the intention of continuing to maintain it as such.

The domicile of a minor shall follow that of the parents unless such minor has been emancipated. In case of emancipation the student, in addition to the requirements of these regulations, respecting residence, shall present satisfactory proof respecting emancipation. Minors under guardianship shall be required to present, in addition to the certification of the domicile of the guardian, satisfactory documentary evidence of the appointment of the guardian. No student shall be considered to have gained residence by reason of his attendance in the University nor shall a student lose residential preference during his continuous attendance at the University. The residence of a wife shall follow that of the husband.

The prescribed form of application for classification as to residence status must be executed by each student. Misrepresentation of facts in order to evade the payment of out-of-state tuition shall be considered sufficient cause for suspension or permanent exclusion from the University. Discretion to adjust individual cases within the spirit of these rules is lodged with the President of the University. Students receiving credit by special examination must pay \$5.00 per credit to be received before the examination may be taken.

SUMMER ORIENTATION FEE

Members of the incoming freshman class attending the summer orientation program on the Amherst campus will pay a non-refundable fee of \$15.00 to cover the cost of meals, housing, testing and counseling. Likewise, incoming freshmen accepted at University of Massachusetts-Boston will pay a non-refundable fee of \$10.00 to cover the cost of testing and counseling.



Registration.



Studying in Library.

PAYMENT DUE DATES

In accordance with University policy, all charges for tuition, fees, board and room rent in University dormitories are due and payable twenty-one days prior to the date of registration of each semester. Bills will be rendered in advance and payment may best be made by mail. Students may not register until all University charges are paid.

A WORD ABOUT FINANCIAL AID

Scholarships, loans, and part-time employment are available for a ~~limited number~~ ^{of} needy and deserving students. A limited number of such awards are available to entering freshmen who have made outstanding records in high school. Applicants for ~~scholarships~~ ^{grants} must file the Parent's Confidential Statement prepared by the College Scholarship Service when the Admissions Application is sent, or no later than March 1st of the admissions year. Students may also apply for certain kinds of loans, including those available under the National Defense Student Loan Program, University loans (after the first semester of the freshman year), and the Higher Education Loan Plan, ^{at the end of the freshman year.} Also, students may engage in part-time work after the completion of the first semester of their freshman year. Information about each of these programs may be obtained by writing to the Director of Placement and Financial Aid Services. ~~Dependents of veterans~~ ^{Dependents of veterans} who are eligible for benefits may also apply to this office for information. ^{at Brown and Union departments.} ^{Copy to the Hon. Committee on Finance}

Scholarships and loans are available for students at the Boston campus. ^{where appropriate applications made to the Office of the Dean of Student Affairs.}

A PLACE TO LIVE, TO WORK, TO LEARN



Goodell Library.

How can I make the most of my college career? Every student asks this question just before the start of his freshman year. Specific answers usually wait until the student is actually in college where teachers and advisers help him to decide on the major course of study he should pursue. Often, of course, a student has already made a decision about his "major," and if the decision is based on a sound assessment of aptitudes and abilities, this is all to the good.

But even for students who are sure about what they want to "take" in college, the question is still very important. The danger in approaching college work lies in the assumption that this is, as with many other activities, "just a routine." As a student reads the general catalogue, he finds rules, regulations, requirements, and prescribed courses of study. All these tend to make him feel that the curriculum is indeed just a routine for getting enough credits to graduate.

For many students this is certainly true. But for the wise student, the word "routine" is supplanted by the word "adventure." The rules and regulations are not thereby eliminated, for every college must have the means of order and stability by which to achieve its basic objectives to which the various groups of

required courses lead. But the good student recognizes that he need not work merely to satisfy *minimal* requirements: he can do much more. If he learns early that thought is not locked within the four walls of a classroom, if he is alive with interest, if he realizes that his four years in college will be the best he will ever have for stocking his mind and exercising his imagination, then his "prescribed course of study" will become a springboard to a fascinating realm of knowledge and ideas that only he himself can attain.

The following paragraphs, therefore, are simply intended to show what the University can offer a student, what it requires of him, and what he must do to fulfill these minimal obligations. Beyond these basic offerings and requirements lies the real adventure — the adventure in learning.

✓ A YEAR-ROUND OPERATION

The University conducts its program on virtually a year-round basis. The regular two semesters of the academic schedule are supplemented by a two-term summer session in which a student can earn nearly the equivalent of a full semester's work. Combining the work of the regular academic year with a complete schedule of courses in the summer sessions, students can finish their college careers in three years instead of four. The summer session is open to all freshmen who wish to begin their college education immediately following graduation from high school. It is also available to high school juniors who are accepted for study at the University under the Early Admission Plan (see below under Program for Superior Students).

✓ THE ACADEMIC PROGRAM

The University consists of two main divisions, the four-year undergraduate curriculum and the Graduate School. Instruction in the undergraduate program is assigned to the College of Agriculture, the College of Arts and Sciences, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing, and Physical Education, and the Department of Public Health. A qualified student may enter any one of these units and work toward the appropriate bachelor's degree, as described on Page 11. The total program is built around a core of studies designed to provide a sound general background. Beyond this, the student elects a program within a particular branch of learning in order to prepare for advanced study in that field or for a career in one of the professions. Offerings in the various branches range from accounting to zoology, and a student electing any major course of study has opportunities for a comprehensive education in the four-year program. Descriptions of the courses of study offered in each of the undergraduate branches can be found in the section beginning on Page 12.

✓ THE PRELIMINARIES: | FRESHMAN ORIENTATION

All students entering as freshmen must attend a three-day orientation program at a specified time during the summer prior to entrance. The program consists of testing, counseling, and pre-registration for courses to be taken during the coming semester. Guidance and placement tests are given and scored, and each

student is assigned a faculty adviser who will help in the selection of courses and planning of a class schedule. On the final day of each of these periods, a special program is held for parents so that they may learn about the student's proposed courses and schedule for the fall semester, the results of the testing sessions, and the facilities and opportunities available at the University.

✓ GENERAL UNIVERSITY SERVICES

The University is a community of individuals working toward a common goal—the acquisition and dissemination of knowledge. As a community, therefore, the institution has all of the adjunct resources needed to further that goal and to provide for the general well-being of the community's members.

Thus, the University maintains an extensive library system, both through the University Library and the 30 departmental and laboratory libraries. In addition, the University is a participating member in the Hampshire Inter-Library Center, housed at the University and containing journals, documents and reference sets for use in study and research. The Center is jointly operated by Amherst, Smith, and Mount Holyoke Colleges and the University under the Four College Co-operation Program engaged in by the four institutions.

Concerned as it is with the need for spiritual underpinnings for the educated man, the University gives support to the religious life of its students in various ways. It affords the use of facilities for student groups of all faiths, and it honors the work of the Campus Religious Council which provides a cooperative inter-relationship among religious groups. Chaplains are assigned to campus by the various faiths, and students are urged to meet with their own chaplain upon coming to the campus.

The University also maintains a Counselling and Guidance Office staffed by highly trained and skilled counselors. This service is available to all students who desire to learn more about themselves and their aptitudes. This office, besides offering specialized advising in addition to that normally given in academic departments, offers courses in reading and study skills in conjunction with the School of Education.

The University Health Service, housed in one of the newest buildings on campus, is concerned with the total health of individuals and groups, as reflected in the need for complete physical, mental and social well-being. The new infirmary contains a fully-equipped out-patient department, X-ray and laboratory resources, and physiotherapy facilities. The Health Service staff of physicians, technicians and nurses is devoted to promoting good physical and mental health, conditions of safety, and other factors affecting the health of students in the campus community. In addition, the University maintains a Speech and Hearing Center to assist students and others with speech and hearing problems.

✓ GRADING SYSTEM

Enrollment in and graduation from the University involve both quality and quantity of work. The quantity of work is measured by the credits obtained by successful completion of courses. The quality of work is measured by grades.

Each grade is equated with a quality point as noted below. The quality point average required for continued enrollment and for graduation is set by the Faculty Senate. At present the graduation requirement is a cumulative average of 1.80.

Grades are reported according to a letter system, as follows: A—Excellent, B—Good, C—Average, D—Passing (but not satisfactory), F—Failure, and Inc.—Incomplete. Quality points per semester hour are assigned as follows: A, 4; B, 3; C, 2; D, 1; and F, 0. To compute the semester grade point average, as well as the cumulative average, the total points earned are divided by the total credits carried. Any student whose semester quality point average falls below the cumulative requirement is warned of his status by the Registrar and informed of the rules governing dismissal. Students who achieve high averages are placed in one of three honors groups each semester, as follows: First Honors: 3.8 or higher; Second Honors: 3.4 to 3.7 inclusive; and Third Honors: 3.0 to 3.3 inclusive.

✓ ADVISORY SYSTEM

In order that, from the day he enrolls, the freshman may have someone to whom he may go for consultation and assistance, each student selects a tentative educational objective and is assigned a faculty adviser within that academic area.

In the second semester of the freshman year, each student is given an opportunity to change to a new department or to remain in his current department. In succeeding semesters, students may change to another major department by execution of a Major Change Card (available in the Registrar's Office). It is the function of this adviser to help the student in adjusting himself to the work and life of the University. Academic progress reports issued by the Registrar's Office are sent to the advisers periodically, and the students are expected to report to their advisers from time to time to discuss their academic standing. The University also forwards reports of academic standing to the parents. Both students and parents are encouraged to consult with the adviser whenever there are problems regarding studies or personal adjustments to college life.

✓ PROGRAMS FOR SUPERIOR STUDENTS

The University regularly provides superior students with challenging educational programs extending from the freshman through the senior year. Under the Early Admission Plan, the University considers applications from students of high standing who have completed their junior year of secondary school.

Many entering students are able to achieve advanced standing and credit for college-level courses successfully completed in their secondary schools as part of the College Entrance Examination Board Advanced Placement Program or an equivalent. The University also administers a number of its own advanced placement tests. A student who demonstrates he is proficient in a basic college subject may by-pass the beginning course and go on to advanced work in the subject. Upon attaining satisfactory standing in many of these courses, students are granted academic credit for the courses by-passed. Also, up to thirty semes-

ter hours of credit may be granted students of high standing who can fulfill the requirements of some of their courses through independent study.

The major feature of the program for superior students is the honors curriculum available to all who qualify. Freshmen are eligible for the Honors Colloquium program conducted for the first three undergraduate classes.

The Senior Honors Program recognizes merit and gives highly qualified students time and opportunity for independent study under closer, more personal direction than is ordinarily provided in the University curriculum. Students who complete their work satisfactorily are eligible for graduation with honors.

STUDENT HOUSING

It is the policy of the Board of Trustees that all men and women undergraduate students shall be housed in campus residence halls and be required to eat at University dining halls unless given permission to commute from their parents' home or to live at sorority or fraternity houses. Sororities and fraternities may furnish regular board to members up to the approved capacity for each house.



As architect envisions new Southwest Dormitory Complex.

Most residence hall rooms are double and all are furnished with beds, mattresses, desks, chairs, mirrors, and a chest of drawers. In addition to this, many have desk lamps, waste baskets and draperies. Students care for their own rooms and are responsible for any damage. Residence halls open for occupancy on the day immediately preceding the opening of the University. All student property must be removed from the rooms and the key returned immediately after final examinations in June. Such property not removed by the owner will be removed by the University and stored at the owner's expense. Students assigned to residence hall rooms will be responsible for the room rent of the entire semester. Room rent is not refundable. Room rental charges do not in-

clude the several regular school vacation periods. The University reserves the right to change room assignments whenever necessary. The University, also, reserves the right to utilize student rooms during vacations for conferences and other groups which meet occasionally on campus.

UNIVERSITY-OWNED APARTMENTS

The University owns and operates two groups of apartments: The University Apartments for new and junior faculty, and the Lincoln Apartments for junior faculty, married graduate and undergraduate students. Apartments are unfurnished with the exception of kitchen units which contain an electric range and refrigerator. Apartments are assigned as of the date of availability. New junior faculty, married graduate students and undergraduate students with children receive consideration in that order. Further housing information and/or applications may be obtained from the University Housing Office in Draper Hall.

MOTOR VEHICLE REGULATIONS

Driving to and from classes is not permitted, and only students in the following categories will normally be authorized to possess and operate a motor vehicle in the Amherst area:

- Commuting students who live over one mile from the center of campus during the academic year.
- Students whose locomotive capability is so seriously impaired that they would be prevented from meeting regular class appointments without motor vehicle assistance.
- Married students residing with spouse.
- Students over 25 years of age.
- Members of the senior class.
- At the discretion of the Dean of Men or Dean of Women, students presenting extenuating circumstances in writing may be authorized to possess motor vehicles.

All motor vehicles must be registered with the University Police. In advance of arrival on campus, eligible students should obtain from the University Police Department a copy of the University regulations pertaining to possession, registration and operation of motor vehicles.

STUDENT ORGANIZATIONS

Participation in extra-curricular activities offers opportunities for furthering the broader objectives of a college experience. The knowledge, skills and judgment developed in the classroom can be tested and refined through use in the organizational setting. Thus, more than fifty professional clubs exist on campus as a means of stimulating vocational interest through close contact with members of the teaching staff and representatives of the professions. Student government offers a forum for debate on matters of importance to the entire University community. For those interested in communications, there are several campus publications as well as an FM radio station. Experience in music and drama is available in a number of forms.

Such activities can be a profitable means of fostering maturity and general enrichment in those students who wish to take optimum advantage of all that the University can offer. In encouraging participation in these activities, the University asks only that students plan their time well, in order that they may profit as much as possible from a total University program devoted, first and foremost, to academic studies.

All extra-curricular activities are supervised by the Committee on Recognized Student Organizations composed of alumni, faculty, and students. Recognition for outstanding achievement in this area is given at an annual Student Leaders Night held in the spring. An office devoted to administering and assisting in the conduct of student activities is located in the Student Union. Detailed information about student organizations may be obtained by contacting the Recognized Student Organizations Adviser.



UMass Redmen in action.

Office of Financial Aid
PLACEMENT SERVICES

The University maintains an Office of Placement and Financial Aid Services whose responsibilities include vocational and financial counseling and the administration of the affairs involved in aiding students to seek appropriate positions and careers; the granting of loans and scholarships; the assignment of part-time work; the coordination of veterans' affairs; and the dissemination of information relative to military service through the draft or reserves. While providing vocational and career counseling for all undergraduates, the emphasis is on aid to seniors in planning their future following graduation and providing

them with job-hunting techniques and other media for finding permanent employment. Actual contact with employers is provided during the year when employers from business, industry, schools, and other sources visit the campus to interview prospective graduates.

Cumulative student personnel records; occupational information and industrial literature libraries; preparation of credentials including personal resumes and recommendations coupled with counseling and guidance are provided to enable senior men and women to accomplish their career objectives consistent with their interests, abilities, aptitudes and education.

THE PROGRAM AND ITS OPPORTUNITIES

The University offers four-year undergraduate curricula leading to the following degrees: Bachelor of Science, Bachelor of Arts, Bachelor of Science in Chemical, Civil, Electrical, Industrial and Mechanical Engineering, and Bachelor of Business Administration. Work toward these degrees is carried on in the College of Agriculture, the College of Arts and Sciences, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing, and Physical Education, and the Department of Public Health. Special arrangements are made for some graduates of county agricultural schools and of agricultural departments of certain high schools to complete the college course with majors in agriculture and horticulture. Upon completion of their course, these students are granted the degree of Bachelor of Vocational Agriculture.

The aim of the four-year course is to give the student as high a degree of proficiency in a particular branch of learning as is possible without sacrificing the breadth, knowledge and general training which should characterize a well-rounded college education. Under this philosophy, the University has made recognized contributions, through its graduates, to the life and culture of America. University alumni hold positions in government, education, business, science and engineering, the arts, medicine, law, and many other professions. With rising enrollments, the University is educating ever greater numbers of young men and women for significant careers and important contributions to American society.

The following pages are designed to give some indication of the variety of such opportunities open to students who are accepted for admission. Descriptions of curricula are given in brief and general terms so that prospective applicants may become quickly acquainted with the entire range of offerings. Graduation requirements for each curriculum have been omitted, principally because a student admitted to the University will have ample opportunity to acquaint himself with such requirements after he has arrived on campus. Courses required in the freshman year, on the other hand, are included in the section beginning on Page 30. Further information on various phases of the major courses of study may be obtained from the Deans of the Colleges and Schools or from the Registrar. Information about other aspects of the University program may be obtained from the appropriate offices listed on Page 32.

COLLEGE OF AGRICULTURE

Arless A. Spielman, Dean — Stockbridge Hall

The College of Agriculture offers a broad general education with specific training in a specialized area. Upon the completion of the requirements for the Bachelor of Science degree, the student will have devoted about one-quarter of his time to pure science, one-quarter to social and humanistic studies, and about one-half to applied science and technology. A broad choice of electives within the required courses of each curriculum gives the student the opportunity to prepare for a career in research, industry, business, education, conservation, services. Each department of the College has specific requirements for graduation which are included in the General Catalog under the name of the department. During the first semester of the freshman year, students interested in teaching vocational agriculture, extension work, or specializing in research work, should consult with the head of the department in which they plan to major.

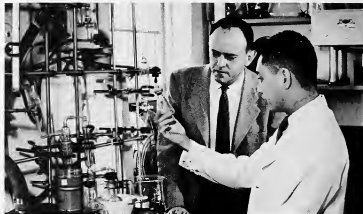
For those students interested in a two-year program in food and agricultural industries, the University provides offerings in the Stockbridge School. A separate bulletin describes these offerings in detail.

The four-year courses of study available in the College of Agriculture include the following:

AGRICULTURAL AND FOOD ECONOMICS. This curriculum is designed (1) to prepare students for employment in executive positions with firms related to agriculture or for administrative positions with governmental agencies concerned with agriculture and (2) to give the essential undergraduate preparation for a career in agricultural economics, in research, teaching, or extension work. The course of study, which leads to the degree of Bachelor of Science, combines training in technical agricultural sciences with courses in business management and economics.

AGRICULTURAL ENGINEERING. Agricultural engineering is concerned with the application of scientific engineering principles to agricultural industries. This professional field includes engineering activities related to the design, development and use of mechanical and electrical equipment; structures; and soil and water control systems for the production, processing and preservation of agricultural products and the improvement of rural living. Agricultural engineers are employed by a variety of agricultural industries and organizations for research, development, teaching, and promotional activities.

ANIMAL SCIENCES. The curriculum in the animal sciences, including poultry, is designed to provide fundamental training and knowledge in the comparative nutrition, physiology, breeding, selection and management of various classes of livestock and to understand the role of animal production in the national and world economy. The curriculum provides for an important degree of flexibility depending upon the students' interest and abilities. Options emphasizing commercial animal production are supported by electives in agricultural economics, agricultural engineering, and business administration. Students in-



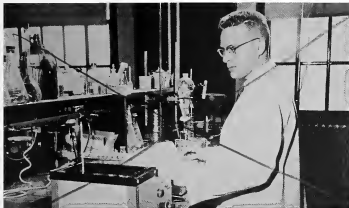
Research in Animal Science.

terested in graduate work in such specialized areas of the animal sciences as nutrition, physiology or genetics should elect programs with special emphasis on the basic sciences.

ENTOMOLOGY. Courses in entomology acquaint students with all phases of insects and insect control, including agriculture and medical entomology. Trained entomologists find positions in public service and industry, such as teaching at all levels; research, quarantine and regulatory work in State or Federal Service, various roles in public health and pest control activities; research, sales and public relations work in the agricultural chemicals industry; and agriculture.

FOOD SCIENCE AND TECHNOLOGY. The curriculum in Food Science and Technology provides scientific and technological training in the principles concerned with the processing, preservation, and packaging of foods and food products. The student's training is directed to the application of modern science and technology to research and to the manufacturing and distribution of foods. Major fields open to graduates include: (1) product research and development; (2) food processing and packaging; (3) technological work and research in government, industry, and education; (4) advanced graduate study.

FORESTRY AND WOOD TECHNOLOGY. The curriculum in Forestry concerns the biology and management of forests for the production of wood, water, wildlife, and opportunities for outdoor recreation. Integrated, multiple-purpose forest use is emphasized. The accredited program prepares graduates for employment with private industry, federal and state agencies, conservation and planning organizations. The program in Wood Technology emphasizes studies in the nature and properties of wood, the engineering and chemical technology



Laboratory in foods research.



Wildlife and fisheries biology.

of its manufacture into a variety of useful products, and the business aspects of industrial management and marketing. Graduates find employment in wood-processing firms and service-related industries, and in marketing and merchandising.

LANDSCAPE ARCHITECTURE. Students following this curriculum, which requires 125 credits for graduation, are prepared through a broad academic approach to take up work in the various phases of landscape architecture. This applied design profession is concerned with the development of land for human use and enjoyment. In addition to the usual areas of interest, such as site planning for private, semi-public and public works of many types, considerable city and regional planning is now available for those interested.

PARK ADMINISTRATION. This new curriculum provides a diversified program for those planning a career in park development, operation and administration. The basic background of landscape design supplemented by a wide selection from the biological and social sciences permits preparation for positions in Federal, State, local governments, and various related commercial enterprises.

PLANT AND SOIL SCIENCES. A major in plant and soil sciences permits specialization in agronomy, turf management, many areas of horticulture, soil science and plant pathology. Emphasis is on courses in the basic sciences and those dealing with the principles of plant growth and response to the environment, thereby preparing students for a variety of careers in teaching, research, industry, business, marketing, production, sales, control and regulatory services with state and federal agencies. A major in plant and soil sciences will be required to take a basic group of subjects in the physical, biological and social sciences as well as the humanities.

PRE-VETERINARY. Students may enroll in either the College of Agriculture or in the College of Arts and Sciences. However, since there is no pre-veterinary major, students will also choose a department for their area of concentration. At the summer counseling sessions, students will have an opportunity to meet and discuss their program with the pre-vet advisor, but the formal pre-registration will be handled by a member of his preselected major department. Students who, by their work in the first year, demonstrate a potential ability for success may, in their third semester, apply to the premedical advisory committee for entrance into the pre-vet program. Others may complete the work for a B.S. degree in the chosen major and then apply to Veterinary Schools.

RESTAURANT AND HOTEL MANAGEMENT. The curriculum in Restaurant and Hotel Management is offered by the Department of Food Science and Technology. The program provides technical and professional courses for persons who plan a career in ownership, management, or sales in the hotel-motel, food service or related fields. Professional courses are balanced with a selection of courses in the arts and sciences which serve to broaden the students' interests and appreciations.

WILDLIFE AND FISHERIES BIOLOGY. Wildlife and Fisheries Biology is concerned with the acquiring and application of knowledge concerning terrestrial and aquatic animal populations which are of recreational or commercial value. This knowledge includes the dynamics of animal population and their responses to changes in environmental conditions, including changes incurred by land use and direct exploitation by man. A broad understanding of geology, forestry, soils, agriculture, botany, and zoology is required.

Done

COLLEGE OF ARTS AND SCIENCES

I. Moyer Hunsberger, Dean — Bartlett Hall

The College of Arts and Sciences offers instruction in the fine arts, the humanities, the social sciences, the natural sciences, and mathematics, both for students enrolled in the College and for those in other undergraduate divisions of the University. The program provides for the breadth of intellectual development essential to a liberal education and for concentration, which is the necessary foundation for competence in a selected discipline.

The Bachelor of Arts degree may be earned by students majoring in any division of the College. The Bachelor of Science degree may be earned by students in the natural sciences, mathematics, or psychology.

The following major courses of study are available in the College:

✓ ART. The Department of Art is interested in providing two kinds of training: The first gives each student a good general historical and aesthetic knowledge of the arts; the second gives each student an opportunity to develop his creative ability in the several media of the arts.

✓ ASTRONOMY. A Department of Astronomy conducted jointly with Amherst, Mount Holyoke, and Smith Colleges provides instruction in this field. All advanced courses are given on a joint basis for students from the four participating institutions.

BOTANY. ^{PLANT PHYSIOLOGY} Programs in botany prepare students for teaching and research in biological sciences in high schools, universities, industry, and experimental stations.

✓ CHEMISTRY. The prime purpose of the Department of Chemistry is to offer sound preparation for graduate study in chemistry. Accordingly, emphasis is placed upon intellectual accomplishment and broad understanding rather than on terminal training for specific chemical tasks. The program designed for this purpose also affords sound preparation for direct entry into chemical industry, chemical institutes, or governmental laboratories.

ECONOMICS. In economics the aims are twofold: (1) to give the student an understanding of economic theory and of the application of economic principles to the organization of society; (2) to provide students with the elementary training necessary for further study and solution of economic and business problems.

ENGLISH. The major in English affords the student opportunities to improve his knowledge of the English language and his ability to use it clearly, logically, and artistically; to increase his knowledge of Western literature written in English or translated with distinction into English; to read and discuss a literary work

Top left — Bartlett Hall. Top right — Creative design class. Lower left — Foreign language study. Lower right — Symphony band in concert.



HUMANITIES

with perception and understanding, and to form an independent estimate of it by valid critical standards.

GEOLOGY. For students considering geology as a career, the opportunities are many. Those interested primarily in basic science may look to positions in teaching, in museum work, on state and federal surveys, and in various research organizations. Those concerned mainly with applied science may direct their efforts toward work in mining geology, petroleum geology, engineering geology, and ground-water geology, and industrial mineralogy.

GERMAN. The courses in German are intended to give a practical knowledge of the language for the purpose of wider reading, research, and oral communication.

GOVERNMENT. The courses offered by the Department of Government are designed to aid the student in gaining a knowledge of the nature, functions, and problems of government, and of the place of government in the modern world. Political theory, constitutional law, international relations, comparative government, politics and public administration are the principal areas covered.

HISTORY. Courses in history are designed to provide an understanding of man through a study of patterns of development in the past. The study should also give the student an introduction to major problems in world affairs.

JOURNALISM. The journalism program is concerned with: (1) the study of writing and of communication problems relevant to the media of mass communication, and (2) the best utilization of the University's liberal education resources by students who plan careers in newspaper work, communications research, public relations, magazine and radio journalism, or some other field of communications.

MATHEMATICS. The department offers courses designed to furnish a cultural background as well as a foundation for both undergraduate and graduate work in mathematics, statistics, physics, chemistry, engineering, econometrics, and biometrics.

MICROBIOLOGY. The courses in microbiology are designed to aid the student in acquiring special knowledge of the nature and function of the micro-organisms and to provide an appreciation of the role of experimental biological science in widening man's horizons.

MUSIC. The undergraduate major program in music is pre-professional, so that courses, music organizations, and private study are the means used to prepare each student. Other undergraduates may minor in music, or follow a sequence of courses for continuing study.

PHILOSOPHY. Philosophy seeks a comprehensive understanding of the various areas of man's experience in their interrelatedness. In the context of the historically important theories, the courses concentrate on methods of inquiry into the persisting questions of philosophy, standards of thought, clarification of ethical and aesthetic values, and the basis of criticism.

PHYSICS. Courses are designed to accommodate students who desire specialized training in physics, and also to provide required or elected courses for

students majoring in engineering, mathematics, chemistry, or other fields.

PRE-MEDICAL AND PRE-DENTAL CURRICULUM. Pre-medical and pre-dental students are assigned to faculty advisers for their freshman year. At the end of their second semester, they will be assigned to a member of the Upperclass Committee who will be their adviser for the remainder of the course of study. Pre-veterinary students may register in the College of Agriculture or the College of Arts and Sciences.

PSYCHOLOGY. The courses in the Psychology Department are planned: (1) to impart an understanding of the basic principles, methods and data of psychology as a science, and the application of this knowledge to problems of human adjustment; (2) to prepare some majors for graduate study which may lead to a professional career in psychology; and (3) to help prepare others for non-professional careers. In carrying out these aims, majors are urged to elect, with the help of a departmental adviser, a broad program of courses.

ROMANCE LANGUAGES. Three majors are offered: French, Spanish, and Classics—the latter through cooperation with Amherst, Smith, and Mount Holyoke Colleges. The courses of these curricula are intended to give: (1) a thorough training in the language skills, (2) an appreciation of the aesthetic and intellectual qualities of the literatures, and (3) a serious insight into the cultures of the nations concerned. Language and literature courses in Portuguese and Italian also are available.

RUSSIAN. Students choosing Russian as their field of major concentration will receive training in reading, writing, speaking and understanding the language, and a knowledge of Russian literature. Russian majors will also acquire the background in Russian history, government and economy necessary for an understanding of the literature and culture of the Russian people.

SOCIOLOGY AND ANTHROPOLOGY. Students may major either in sociology or anthropology. Courses are planned with two aims in view: to give the student an understanding of the factors which influence men in their activities and interests as members of society, and to help prepare students for a wide variety of occupational outlets, including social work.

SPEECH. The courses offered in the department of speech are concerned with the theory and practice of spoken communication in its various applications. An undergraduate major in speech may choose one of five areas of communication: (1) Rhetoric and Public Address, (2) Interpretation and Theatre, (3) Radio and Television, (4) Speech Education, (5) Speech and Hearing Therapy.

STATISTICS. Although there is no undergraduate major in statistics, the courses are designed for those who are preparing for graduate work in statistics or for those who require statistics as a basic preparation for their own subject-matter discipline.

ZOOLOGY. The courses in zoology have two major aims: (1) to offer students an opportunity to develop an understanding and appreciation of the scientific method as a part of a liberal education; and (2) to provide training for prospective graduate students in biology, medicine, dentistry, and related fields, as well as for future teachers and laboratory technicians in the biological sciences.

SCHOOL OF BUSINESS ADMINISTRATION

H. B. Kirshen, Dean — School of Business Administration Building

The School of Business Administration prepares students to take advantage of important economic opportunities and eventually to assume positions of responsibility in business. The educational program is directed toward the broad aspects of business, encouraging high standards of ethical conduct, broad social responsibilities and the development of competence in courses of study of the student's interest, aptitude and choice.

The first two years emphasize general education by providing fundamental courses in the humanities, mathematics, science and social science. In addition, basic courses in accounting and economics prepare the student for further work in the School of Business Administration. The junior and senior years emphasize a greater degree of specialization. But even in these last two years all students need to view business as a whole in so far as a "core" of courses can do this. This "core" is required of all students. A total of at least 120 credit hours is required (122 in Accounting) for graduation exclusive of credit received in the required physical education courses. Each course of study leads to the degree of Bachelor of Business Administration.

All students in the School of Business Administration must attain, as a graduation requirement, a 2.0 average in Accounting 125 and 126, Elementary Economic Statistics 121, and the junior "core" courses: Finance 210, Financial Institutions; Finance 201, Corporation Finance; General Business 260, Business Law I; Management 201, Principles of Management; and Marketing 253, Principles of Marketing. The "core" must be completed by the end of the junior year unless a student, on recommendation of his department chairman, has received permission from the Dean to postpone any such course to the senior year.

Students transferring from any School or College within the University shall receive junior and senior elective credit only for those courses passed with a grade of C or better.

Students transferring from outside the University as juniors or seniors must complete a minimum of 12 credit hours in courses offered by his major Department.

Students transferring from junior or community colleges should complete two years of a program in the Liberal Arts including only the one year course in Accounting and in Economics. Students from junior or community colleges who wish credit for completed courses that are offered here on the junior or senior level must pass an examination in each such course conducted by the department concerned.

The School of Business Administration is a member of the American Association of Collegiate Schools of Business.

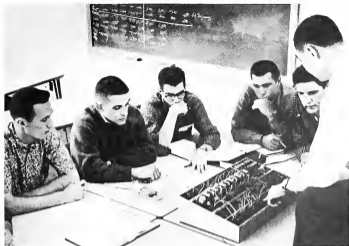
Major courses of study are available in the School of Business Administration as follows:



School of Business Administration building.

Lecture hall in the School of Business Administration.





A class in computer techniques for business analyses.

ACCOUNTING. The accounting program is designed to prepare students for public accounting and for positions as accountants in business, industry and government.

GENERAL BUSINESS AND FINANCE. The department has four major programs: *Finance, Business Administration and Economics, General Business and Urban and Regional Studies.* The curriculum in Finance is directed towards the fields of banking, investment, brokerage, insurance or governmental agencies concerned with finance. The curriculum in Business Administration and Economics comprehends a wider field to balance a knowledge of both economics and business. The curriculum in General Business was designed for students who do not wish to specialize in any particular field. The curriculum in Urban and Regional Studies is an interdisciplinary program directed toward the problems of metropolitan areas.

MANAGEMENT. Industry and business offer qualified students an opportunity to find careers in General Management, Production Management, and in Personnel Management and Industrial Relations. Course programs are offered in each of these fields and provide the student both a specialized and a comprehensive understanding of the managerial process in industrial enterprises.

MARKETING. Students in marketing prepare for a variety of positions in wholesale and retail enterprises and in the sales activities of manufacturers. The program includes specialized study of basic types of market operations such as advertising, sales management and retailing.



View of the Ralph C. Mahar Auditorium.

Students learn to use complex office machines.





Class in audio-visual methods.



Observation classroom in the Mark's Meadow Laboratory School.

SCHOOL OF EDUCATION

Albert W. Purvis, Dean — School of Education Building

The School of Education through its undergraduate program seeks to utilize the forces of the University to prepare teachers for elementary and secondary schools and through its graduate offering to prepare administrators and specialists in public education. Its program is based upon the assumption that teachers and other school personnel should have a broad liberal education, considerable mastery of at least one field, and professional courses which should lead to a knowledge of the persons to be taught, familiarity with the problems to be met, and practice in the best techniques of teaching and supervision. In all of this the School of Education takes the position that teacher education is a University function and that success will come only if the School is successful in maintaining the closest possible relationships with other schools and departments that contribute to the program.

All students who contemplate teaching as a career should register early, in their freshman year if possible, with the School of Education although their courses in education do not begin until the junior year. In general, students are admitted without question to the various service courses of the junior and senior years, but admission to the teacher-training program of the concentrated semester block is determined by a composite rating based on scholarship as shown by University grades for a three-year average at least as high as the University median is desired), success in the beginning courses in education, recommendations of University teachers in general education fields, and personality ratings by members of the staff.

ELEMENTARY SCHOOL TEACHING. Candidates for this program major in elementary education. In certain cases, with the approval of the Dean of the School of Education, the student may be permitted to major in some department of the College of Arts and Sciences where the general education program is deemed the equivalent of that designed for elementary education majors. This permission should be requested in freshman year. Such students will satisfy the requirements of their major department so far as the first two years are concerned but they should utilize their electives to take such courses as Government 100, Zoology 200, History 150, 151 and Art or Music which are



Learning experience for students majoring in elementary education.

recommended by the School of Education. They should take Education 009, 039, 059. The core program for elementary education majors including Education 251 and 264, and Psychology 261 or Home Economics 270, Music 231 and the Elementary Education Block should be taken in the junior and senior years.

SECONDARY SCHOOL TEACHING. All candidates for secondary school teaching will major in the subject field to be taught and minor in education. A maximum of eighteen hours should be taken in this minor. Education 251 and Psychology 301 are required during junior year and Education 310, 311, 385 (called the secondary block) in one semester of senior year. Since the concentrated semester block in secondary school teacher-training carries only twelve credits for some majors, students should consult with their major adviser regarding means of making up the extra three credits, and of meeting all their major requirements in the three semesters of junior and senior years.

SPECIAL FIELD PROGRAMS FOR PROSPECTIVE TEACHERS. In Vocational Agriculture. This program is based on a cooperative agreement between the University and the Vocational Division of the State Department of Education which provides supervisors and consultants in conducting the program. Students otherwise qualified may prepare to teach vocational agriculture by the satisfac-



Artistic expression is encouraged at Mark's Meadow.

tory completion of Education 372, 373, and 375. Education 310 is also recommended. To insure a desirable range of preparation, students who contemplate vocational teaching should consult the Dean early in the freshman year if possible.

A vocational teacher-training certificate is awarded by the Vocational Division to those who fully qualify.

In Home Economics (Mrs. Marjorie Sullivan, adviser). These students will major in home economics and minor in education. They should elect Education 251, Psychology 301, Home Economics 381 and the concentrated semester block (Education 311, 385).

In Teacher Coaching (S. W. Kauffman, adviser). These students will major in physical education and minor in education. They should elect Psychology 261 and the concentrated semester block (Education 310, 311, 385). They should elect a minor teaching field from the College of Arts and Sciences consisting of a minimum of eighteen hours.

In Music. These students will major in music and minor in education. They should elect Education 251, Psychology 261, Music 321, and the concentrated semester block (Education 311, 385).

SCHOOL OF ENGINEERING

E. E. Lindsey, Acting Dean — Main Engineering Building

The departments of Chemical Engineering, Civil Engineering, Mechanical Engineering and Electrical Engineering comprise the School of Engineering. Each department offers a curriculum leading to a Bachelor of Science degree in that particular branch. A curriculum in Industrial Engineering is offered in the Mechanical Engineering department. All curricula are accredited by the Engineers Council for Professional Development.

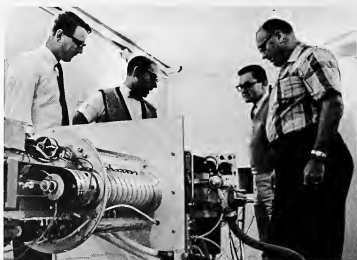
Engineering can be defined as the combination of science and art by which materials and power are made useful to mankind. An engineer requires intensive technical training but at the same time he should acquire the broad education that distinguishes the professional man from the technician. His education does not end with formal schooling but continues throughout his life as he accumulates experience.

The curricula in engineering have been carefully prepared to offer each student the opportunity to acquire the sound training in mathematics and the basic sciences of chemistry and physics upon which is built the work in the engineering sciences. In the senior year courses are offered which enable the student to use his previous training for engineering analysis, design and engineering systems in his particular field of interest. About twenty per cent of his time is devoted to studies in the social science and humanistic area. Some opportunity is provided to elect courses from both the technical and humanistic-social fields.

The curriculum of the freshman year is the same for all. Specialization to a limited extent begins in the sophomore year.

CHEMICAL ENGINEERING. Chemical Engineering is concerned with the development of manufacturing processes in which chemical or certain physical changes of materials are involved. These are resolved into a coordinated series of unit operations (physical changes) and unit processes (chemical changes). The work of the chemical engineer is primarily concerned with the design, construction, and operation of equipment and plants in which these are applied. Chemistry, physics, and mathematics are the underlying sciences of chemical engineering, and economics is its guide in practice.

Chemical engineers are employed not only in industry manufacturing chemicals but in many others, such as petroleum refining, coal processing, refractories and clay products, cement, waste treatment, pulp and paper, rayon and textiles, paint and varnish, natural and synthetic rubber, foods, leather, plastics, soap, penicillin and other antibiotics. Much of the work of the atomic energy program is chemical engineering. The types of work done by chemical engineers include: design, construction, research, development, production, financial and patent appraisal, management, and sales.



Pulsed Neutron Generator.

CIVIL ENGINEERING. Civil engineering is concerned with structures, transportation, movement of fluids, use and storage of water, sanitation, and surveying and mapping. A civil engineer may be engaged in research, in planning and designing, in construction, or in maintenance and operation.

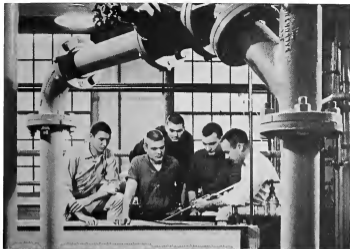
The curriculum gives a thorough training in the fundamental physical sciences and at the same time prepares a student for work in any branch of civil engineering, allowing him to specialize to some extent in whatever branch is most interesting to him — sanitation, mechanics and structures, hydraulics, foundation engineering, highway engineering.

ELECTRICAL ENGINEERING. Electrical engineering deals with the engineering applications of electricity. Because of its unusual amount of diversity, it is usually convenient to separate it into such main divisions as power, communications, electronics and control, and others.

The undergraduate curriculum is designed to prepare the student for work in any of these fields and to serve as a basis for further specialization. Courses in liberal arts and in engineering courses outside of the department give the student an understanding of the broader aspects of engineering and other fields.

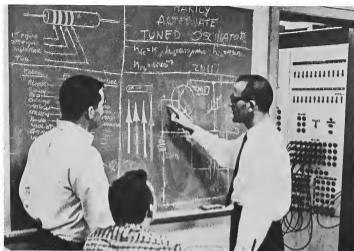
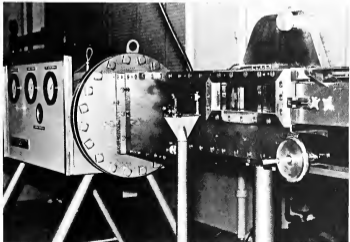
MECHANICAL ENGINEERING. Mechanical engineering is that branch of the profession which, broadly speaking, covers the fields of heat, power, design of machinery, industrial management and manufacturing problems.

Building upon a foundation of mathematics, physics, and chemistry, the department of mechanical engineering undertakes to show the student how funda-



Fluid mechanics laboratory.

Test section of Mach 4 wind tunnel.



A demonstration in electrical engineering.

mental physical laws apply to this field and to give him thorough training in the basic principles so that particular application can be mastered in professional practice. Therefore, no attempt is made to give highly specialized instruction.

INDUSTRIAL ENGINEERING. Industrial engineering is concerned with the engineering aspects of the organization, operation and management of manufacturing plants. Consequently, the industrial engineering curriculum is built on a foundation of mechanical engineering. To the technical knowledge and scientific attitude developed through the study of engineering is added the study of certain courses in the humanities, in economics, and in management.

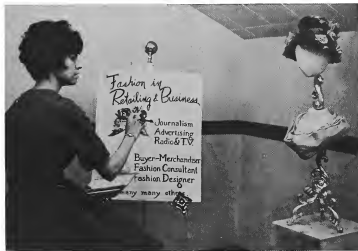
ENGINEERING SCIENCE OPTION. Engineering science is concerned with the application of the basic sciences to research and development in the engineering field. As such the curriculum contains extensive mathematics, physics, and other courses in the basic sciences designed to develop the student's skill in precise physical reasoning, analysis and synthesis. The student may elect the option from one of the four major departments at the end of his sophomore year provided he has completed his freshman and sophomore years with a quality point average of 2.80 or above or has achieved a cumulative average of 3.20 for the two preceding semesters.

The freshman year is the same for all students and the sophomore year corresponds to that major department in which the student is enrolled.



Skinner Hall: the School of Home Economics.

Projects in fashion merchandising prepare students for careers in business.



SCHOOL OF HOME ECONOMICS

Marion A. Niederpruem, Dean — Skinner Hall

Home Economics encompasses areas of study which apply the principles and concepts of fundamental arts and sciences to the physiological, psychological, social and economic environmental needs of man.

The School of Home Economics has five subject matter areas (departments), namely: Food and Nutrition (FN), Textiles, Clothing and Environmental Arts (TCEA); Management and Family Economics (MFE); Human Development (HD); and Home Economics Education (HEEd.). The letters in parenthesis are area codes. Within these five areas the following undergraduate majors are offered:

DIETETICS AND INSTITUTIONAL ADMINISTRATION

FOODS IN BUSINESS

FASHION MERCHANDISING

HOME MANAGEMENT (Sept. 1966)

CHILD DEVELOPMENT

SECONDARY EDUCATION AND EXTENSION

The undergraduate program of the School, leading to a Bachelor of Science degree, emphasizes a liberal education in the sciences, arts and humanities with specialized instruction as preparation for professional careers. The transitional continuing relationships between liberal and professional education seek to develop in the student a disciplined mind, mental curiosity and professional competence.

Professional home economists are college and university graduates with bachelor degrees in Home Economics. They serve individuals, families, and communities through schools and colleges, extension programs, business organizations of many kinds all over the world, community and government organizations and agencies, newspapers, magazines, radio and television. Representative types of activities that Home Economists participate in include teaching, research, writing, dietetics, extension work, interior decoration, fashion merchandising, food consulting, food service management and product development. Experience and advanced study in areas of specialization lead to positions of great responsibility.

✓ Food and Nutrition

Food and Nutrition curricula provide courses in Food and Nutrition combined with a strong foundation in the Arts and Sciences with two majors: Dietetics and Institutional Administration; and Foods in Business.

DIETETICS AND INSTITUTIONAL ADMINISTRATION. This curriculum prepares the student for positions as therapeutic and administrative dietitians; teaching and research dietitians and nutritionists with public and private agencies. An

increasing number of new opportunities continually challenge graduates in this major.

The sequence offers opportunities for further work at the graduate level. This program is planned to meet the basic requirements of the American Dietetic Association for admission to approved dietetic internships.

FOODS IN BUSINESS. This curriculum is based on professional training in Food and Nutrition combined with other selected courses in Home Economics, the humanities, Western cultures, social sciences and business. The program is directed for the student who is oriented to the business world, and leads directly into development and promotion with food, equipment and utility industries. Positions are open in the field of communications for the student who combines her knowledge of Food, Nutrition and Equipment with Journalism, English, Speech, Television and Radio. Graduates with a major in this sequence are also placed in advertising and public relations agencies or with a consulting firm. This curriculum allows students to pursue graduate study.

✓ Textiles, Clothing and Environmental Arts

FASHION MERCHANDISING. The retailing and professional opportunities associated with clothing, textiles, home furnishings and related merchandise are limitless. They include positions with manufacturers, producers, retailers, buying organizations, newspapers and magazines, radio and TV and consumer groups, as well as educational institutions and social and government agencies. The student who is interested in the business field pursues, by specializing in this area, a curriculum with a strong program of liberal arts emphasizing the social sciences. Courses which build on this foundation providing professional business competency include fundamentals of clothing, textiles, fashion and environmental arts as well as courses in business, retailing and related subjects. Those students who are particularly interested in Interior Design may follow a slightly different sequence of courses.

✓ Management and Family Economics

The area of Management and Family Economics is concerned with achievement of goals and mediation of values within the family. Decision-making and organizing processes are studied as the means to these ends. The field is concerned with the family as an economic unit and social system. Sociology, Economics, Anthropology and Philosophy provide support for the field.

HOME MANAGEMENT. The undergraduate specialization in this area is planned for September 1966. The curriculum provides breadth in Home Economics and depth in the Social Sciences. It will prepare students for positions as home economists in private and governmental agencies concerned with family education and welfare here and abroad. It meets the requirements for Civil Service positions. In addition, the curriculum provides the foundation for graduate work.

Field experience with agencies serving families will be provided to aid the student in gaining competence in implementing programs related to family education and welfare.

✓ Human Development

The area of Human Development is of necessity interdisciplinary in nature. The program brings together knowledge from Psychology, Sociology, Anatomy, Physiology, Nutrition, Education, the Arts, Anthropology, and relates it to Human Development and early childhood education. It is concerned with all maturational and environmental effects upon developing individuals, and with all theoretical and empirical descriptions of how this development occurs.

CHILD DEVELOPMENT. The child development program prepares the student for work in various types of group programs serving preschool-aged children, such as laboratory, public, and private nursery schools, clinics for exceptional children, hospital recreation programs, and community and welfare agencies. In addition, the child development curriculum provides a good background for graduate work in various other child serving professions.

Directed experience with the children of the laboratory nursery school and their families provides the necessary opportunity for students to develop a sound personal philosophy of early childhood education, and to achieve competence in implementing it. More intense specialization for qualified students may be obtained by the election of a one-semester affiliation with: (1) Merrill-Palmer Institute in Detroit, Michigan, which specializes in the study of human development and family life; (2) the Eliot-Pearson School in Boston, Massachusetts, which specializes in the education of the three-to-six-year-old child.



Students learn to use television to extend food and nutritional information to consumers.



Learning experience for student majoring in nursery school education.

✓ Home Economics Education

Home Economics Education offers a curriculum which provides a broad cultural education and preparation for teaching in secondary schools and the Cooperative Extension Service.

SECONDARY EDUCATION AND EXTENSION. The School of Home Economics, in cooperation with the School of Education, prepares students for teaching home economics in junior and senior high schools. This curriculum serves also as a base for graduate study in subject matter areas in home economics and home economics education. Students interested in the Cooperative Extension Service will, with the assistance of an extension adviser, select courses in preparation for continuing education positions in adult and 4-H programs.



Care of the elderly patient at home as part of community nursing experience.

SCHOOL OF NURSING

Mary A. Maher, Dean — Western Massachusetts Public Health Center

The basic nursing program is designed to prepare the qualified high school graduate for a career in professional nursing, as well as for the responsibilities of family and community life.

The program aims to equip the graduate with those understandings and skills which are needed to function effectively in beginning positions in a variety of nursing situations. These include the ability to provide competent nursing care to patients and families in the hospital, home and community; to participate with allied professional and citizen groups for the improvement of total health services to individuals and communities; to participate in organizing, planning and directing the work of nursing auxiliary workers. The baccalaureate program provides a foundation for advanced study, through which the nurse may become prepared for positions in teaching, supervision, administration, consultation and research.



Western Massachusetts Public Health Center, home of the School of Nursing.

During the first two years, the student builds an educational foundation upon which to base the more specialized portion of the program. Courses in the humanities and in the sciences — biological, physical and behavioral — are taken with other students on the campus.

The clinical aspects of the program are developed in the next two years, when instruction and correlated clinical nursing practice are given in selected co-operating agencies by the nursing faculty of the University and the allied professional staffs of the cooperating agencies. These agencies include: the Springfield, Wesson Memorial, and Wesson Maternity Hospitals in Springfield; the Northampton State Hospital; the Visiting Nurse Association of Springfield; the Springfield Health Department, and other community health, educational and welfare resources.

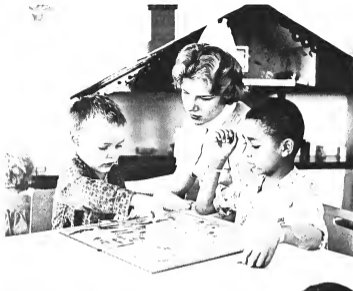
The Bachelor of Science degree, awarded upon successful completion of this program, qualifies the graduate for admission to the State Board Examinations in Nursing. If achievement in these examinations is satisfactory, the candidate receives legal status as a registered nurse within the state.

The program is accredited by the Massachusetts Board of Registration in Nursing and Accrediting Service of the National League for Nursing.



Essential foundation for Nursing: Anatomy Laboratory.

Mother-newborn infant relationships taught in the Mother-Baby unit of the maternity hospital.



Clinical experience with children in a hospital unit.

Essential foundation for Nursing: Physiology Laboratory.



SCHOOL OF PHYSICAL EDUCATION

Warren P. McGuirk, Dean — Frank L. Boyden Physical Education Building

The School of Physical Education includes the Departments of Physical Education for Men, Physical Education for Women, Recreation, and Athletics. It offers undergraduate majors in Physical Education and in Recreation and a graduate degree in Physical Education.

Physical Education for Men

GENERAL PROGRAM. Each male freshman and sophomore student, unless exempted under certain conditions, must successfully complete four semesters of physical education and demonstrate his ability to swim as a requirement for his degree. The physical education requirement does not apply to those students excused by the University physician, veterans of more than six months of military service, and certain transfer students.

Students may receive credit for physical education, during the sport in season by becoming squad members of any freshman or varsity team. Freshmen who elect an athletic team sport for physical education credit must rejoin their class sections at the termination of the seasonal sport. Students may not participate in a given sport for credit for more than two semesters.

MAJOR PROGRAM. The major program leading to the degree of Bachelor of Science in physical education is designed to train the student for a career as a teacher of physical education. The curriculum combines both general and professional education and provides for full teacher certification for the student who has met the prescribed requirements of preparation. The program also provides for adequate training in a minor area of teaching, elected by the student, including the coaching of inter-school athletics.

Physical Education for Women

GENERAL PROGRAM. Physical Education is required of all women students during their freshman and sophomore years. The courses are planned to provide recreative activity, to improve individual skills, to develop body grace and efficiency and to increase health and vigor.

The first and second year women students are required to take three class hours a week for a total of eight credits, one for each quarter of satisfactory work.

MAJOR PROGRAM. The major course in physical education is planned to prepare women students for professional careers. Special attention is given to preparing teachers for elementary and secondary schools in both physical and

health education. Other areas for which the graduate will qualify are teaching sports and dance in social agencies, industrial plants, civic centers and camps. A foundation will be laid for specialization in graduate study. The curriculum gives a broad general background as well as the professional preparation.

Recreation

MAJOR PROGRAM. The department seeks to prepare men and women for positions involving administrative, supervisory and program leadership responsibilities in municipal recreation agencies, voluntary and youth-serving agencies, hospitals, and industrial and institutional organizations.

The program is designed to provide opportunities for a general education, a knowledge and understanding of people and society, activity skills and resource knowledge, professional competency, and practical experience in various leadership situations.

In addition to completing the curriculum as described below, the student is required to:

- (1) attend a professional conference approved by the department;
- (2) participate in programming activities at the Student Union, with a scout troop, or in a similar setting approved by the department;
- (3) devote one summer (minimum of six weeks) to a recreation position, preferably with pay, in a camp, playground, or similar setting approved by the department.

Intercollegiate and Intramural Athletics

The University supports the Department's belief that there are educational advantages in a well-organized intercollegiate and intramural sports program. In intercollegiate athletics, the University is represented by teams in all the leading sports, including football, soccer, cross-country, basketball, swimming, wrestling, indoor and outdoor track, hockey, rifle and pistol, baseball, tennis, golf, lacrosse, gymnastics, and skiing.

The Athletic Department also supports a broad program of intramural activities, in which all students are encouraged to participate. The range of sports available each year includes the team sports of touch football, basketball, softball, and volleyball. Individual activities include tennis, bowling, badminton, golf, squash, and handball.

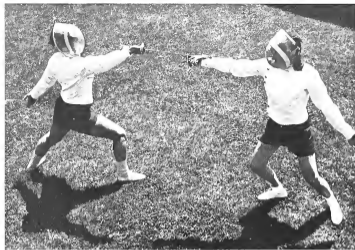
The University Intercollegiate Athletic Program is supervised by the University Athletic Council and is composed of the following members: five faculty members appointed by the President, three alumni representatives appointed by the Directors of the Alumni Association, the Executive Director of the Alumni Association, and ex officio, the Director of Athletics.

The University of Massachusetts is a member of the Yankee Conference, the National Collegiate Athletic Association, the Eastern College Athletic Conference, the Association of New England Colleges for Conference on Athletics, and the Intercollegiate Athletic Association.



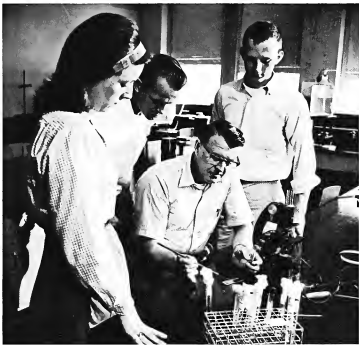
Women's Physical Education Building

Frank L. Boyden Physical Education Building for Men



A few of the activities associated with the major areas in the School of Physical Education





Student-Faculty Research Projects are part of the Public Health teaching program.

DEPARTMENT OF PUBLIC HEALTH

Robert W. Gage, Chairman

The Department of Public Health offers undergraduate instruction in the area of environmental health, public health administration, and medical technology. It also offers a graduate program leading to the degree of Master of Science in Environmental Health.

PUBLIC HEALTH. Public health practice is offering an increasing variety of significant career opportunities in many areas. Among these are the following: (1) administration of community health services; (2) general or specialized direction of environmental health services; (3) work and research in the basic sciences related to health; (4) work in the food and drug protective services; (5) involvement in health education, and (6) participation in programs of health



Faculty study new methods for solving environmental health problems.

information and communication. It is the intent of the Department of Public Health to provide, within the University's framework of presenting a liberal education to all its students, a basis for competence and skill in at least one of these areas. In addition, the program is intended to provide a solid comprehensive foundation upon which subsequent specialized or graduate study can be continued in any of the major areas of public health.

MEDICAL TECHNOLOGY. The curriculum in medical technology is recommended for young men and women in preparation for a wide variety of occupational opportunities. Medical technology graduates may be prepared for positions in medical laboratories, in federal, state, and local health departments, and in commercial and research laboratories. In this area there are two possibilities for arrangement of the curriculum. Students may complete the full four years of undergraduate instruction and, after receiving their baccalaureate degree, enter a 12-month internship in an approved hospital laboratory. At the end of this (fifth) year of preparation, the student will be eligible for examination by the American Society of Clinical Pathologists to qualify for the Registry of Medical Technology.

An optional three-and-one program is now offered which allows the student to obtain the baccalaureate degree and complete the requirements for examination for registration in a total of four years. In this program the student is able to complete the University's core requirements and complete the preparation for the clinical laboratory training within three years. The fourth year of study is taken in one of the hospitals affiliating with this department and approved for clinical laboratory training. Academic credit is granted for participation in this program so that by the end of four years, a student will have gained a total of 120 credits, which is sufficient for graduation.



ROTC — Ready for action.



Army ROTC Cadets on a winter practical training exercise.



UMass Cadet is given a pre-flight briefing on the F-106.



Cadets are briefed at Pentagon by Secretary of the Air Force, Eugene Zuckert.

DIVISION OF MILITARY AND AIR SCIENCE

The Division of Military and Air Science includes the Department of Military Science and the Department of Air Science. No major is offered in either department. Effective academic year 1963-1964, the ROTC (Army and Air Force) program became voluntary. Male students who are physically qualified may register in the two-year basic ROTC course and receive credit toward graduation. Completion of the basic course is a requirement for enrollment in the advanced course which leads to a commission in the armed forces.

DEPARTMENT OF MILITARY SCIENCE (GMS)

Joseph A. Bohnak, Colonel, U. S. Army, Head

The Army Reserve Officers Training Corps is the means by which young men who have taken the leadership step of coming to the state university may assure themselves that their military service is performed in commissioned status. The first two years are basic training in leadership and citizenship. The student is informed on the position of the military in the current scene and as it relates to his future. The second two years of ROTC are not only elective, but selective. The best qualified students are selected and are permitted to contract to continue on to a commission. The Army provides these men a subsistence allowance and additional emoluments. There is a six-week summer camp training period between the junior and senior year. Participation in ROTC has notable effect in character development. It also discloses to the Army existing officer material and its potential leaders. Successful completion of this program leads

DEPARTMENT OF AIR SCIENCE

Roy D. Simmons, Lt. Colonel, USAF, Head

The mission of the Department of Air Science is to develop in select students those qualities of leadership and other attributes essential to their progressive advancement to positions of increasing responsibility as commissioned officers. It is not expected that all students commissioned will select the United States Air Force as a career; however, the program provides excellent preparation for such a career. Further, even though an Air Force career is not selected, the experience gained and the leadership qualities developed will enhance professional and managerial opportunities in the business society.

The program is presented in two phases; the Freshman and Sophomore years are designated as the Basic Course, and the Junior and Senior years as the Advanced Course.

The first two years of the program are not obligatory and are designed primarily to educate the student to the point where he can make a more intelligent decision concerning his military obligation and whether a tour of active duty as a commissioned officer corresponds with his career objectives.

COURSE REQUIREMENTS IN THE FRESHMAN YEAR

The following listings are designed to give prospective students a complete schedule of the courses required in the freshman year in all colleges and schools of the University.

Notes: Courses in Military and Air Science, although listed among the programs below, are elective offerings and are not required for graduation.

COLLEGE OF AGRICULTURE

1st Semester	Credits
ENGLISH 111	2
SPEECH 101*	2
MATHEMATICS	3
CHEMISTRY 111	3
BOTANY 100	3
MILITARY OR AIR SCIENCE 111 (MEN)	1
AGRICULTURAL AND FOOD ECONOMICS 110	2
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101*	2
MATHEMATICS	3
CHEMISTRY 112	3
ZOOLOGY 101	3
ELECTIVE ¹	3
MILITARY OR AIR SCIENCE 112 (MEN)	1
PHYSICAL ED. 002A, B	0

¹A foreign language may be substituted for the Agricultural and Food Economics-elective sequence.

*May be taken either semester or during a later year.

Freshmen majoring in Agricultural Engineering take the program listed under the School of Engineering. Freshmen majoring in Landscape Architecture will take Government 125 in place of Zoology 101, Art 100 in place of Food Economics 110, and Sociology in place of Chemistry 112. Majors in Restaurant and Hotel Management take Restaurant and Hotel Management 100 in place of Botany 100, and Microbiology 150 in place of Zoology 101.

COLLEGE OF ARTS AND SCIENCES

1st Semester	Credits
ENGLISH 111	2
SPEECH 101*	2
MATHEMATICS OR NATURAL SCIENCE ¹	3
NATURAL SCIENCE OR HISTORY 100 ²	3
FOREIGN LANGUAGE ³	3
ELECTIVE ⁴	3
MILITARY OR AIR SCIENCE 111 (MEN)	1
PHYSICAL ED. 001A, B	0

notes see 8 p 75000

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101*	2
MATHEMATICS OR NATURAL SCIENCE ¹	3
NATURAL SCIENCE OR HISTORY 101 ²	3
FOREIGN LANGUAGE ³	3
ELECTIVE ⁴	3
MILITARY OR AIR SCIENCE 112 (MEN)	1
PHYSICAL ED. 002A, B	0

¹Candidates for the B.S. degree take Mathematics. Those planning to major in chemistry or physics should, if possible, elect Mathematics 135 and 136.

²Candidates for the B.S. degree take natural science; candidates for the B.A. degree take History 100 and 101.

³Subject to exemption on basis of proficiency examination.

⁴Candidates for the B.S. degree take science.

*May be taken either semester.

SCHOOL OF BUSINESS ADMINISTRATION

In each subject a one year sequence is required.

1st Semester	Credits
ENGLISH 111	2
SPEECH 101*	2
MATHEMATICS	3-4
HIST. 100, 150, OR GOVT. 100	3
SCIENCE: ELECT ONE	3

CHEMISTRY 111	
PHYSICS 103	
BOTANY 100	
GEOLOGY 101	
ZOOLOGY 101	
ELECTIVE	3
MILITARY OR AIR SCIENCE 111	1
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101*	2
MATHEMATICS	3-4
HIST. 101, 151, OR GOVT. 150	3
SCIENCE: ELECT ONE	3

CHEMISTRY 112	
PHYSICS 104	
BOTANY 125	
GEOLOGY 102	
ZOOLOGY 125 AND 135	
ELECTIVE	3
MILITARY OR AIR SCIENCE 112	1
PHYSICAL ED. 002A, B	0

*May be taken either semester.

SCHOOL OF EDUCATION

1st Semester	Credits
ENGLISH 111	2
SPEECH 101*	2
MATH. 111 OR CHEM. 111	3
ZOOL. 101 OR BOT. 100	3
FOREIGN LANG.**	3
HISTORY 100	3
EDUCATION 109†	0
MILITARY OR AIR SCIENCE 111 (MEN)	1
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101*	2
MATH. 112 OR CHEM. 112	3
BOT. 100 OR ZOOL. 101	3
FOREIGN LANG.**	3
HISTORY 101	3
EDUCATION 109†	0
MILITARY OR AIR SCIENCE 112 (MEN)	1
PHYSICAL ED. 002A, B	0

*May be taken either semester.

**Intermediate Proficiency Required.

†To be completed in a school year.

SCHOOL OF ENGINEERING

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
SPEECH 101, PUBLIC SPEAKING	2
MATH, 135, CALCULUS	3
CHEM. 111 OR 113, GENERAL*	3-4
ENGINEERING 103, GRAPHICS	3
SOCIAL SCIENCE ELECTIVE	3
MILITARY OR AIR SCIENCE 111**	1
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
MATH. 136, CALCULUS	3
CHEM. 112 OR 114, GENERAL*	3-4
ENGINEERING 104, PROBLEMS	2
PHYSICS 105, GENERAL	3
SOCIAL SCIENCE ELECTIVE	3
MILITARY OR AIR SCIENCE 112**	1
PHYSICAL ED. 002A, B	0

*It is recommended that Chemical Engineering majors take Chemistry 113 and 114 in place of Chemistry 111 and 112.

**Military or Air Science is optional.

SCHOOL OF HOME ECONOMICS

Key: FN — Food and Nutrition
TCEA — Textiles, Clothing and Environmental Arts
HEEd. — Home Economics Education

MAJOR IN DIETETIC AND
INSTITUTIONAL ADMINISTRATION

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
CHEMISTRY 111, GENERAL	3
HEEd. 120, INTRO. TO H. EC.	1
FN 127, MAN & NUTRITION	3
SOCIOLOGY 101, INTRODUCTORY	3
HISTORY, GOVERNMENT OR MATH.	3
PHYSICAL ED. 001A, B	0
2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
SPEECH 101, ORAL COMMUNICATION	2
CHEMISTRY 112, GENERAL	3
ZOOLOGY 101, INTRODUCTORY	3
FN 130, FOOD SCIENCE & PREP.	3
PSYCHOLOGY 101, GENERAL	3
PHYSICAL ED. 002A, B	0

MAJOR IN FOOD AND NUTRITION IN BUSINESS

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
SPEECH 101, ORAL COMMUNICATION	2
SOCIOLOGY 101, INTRODUCTORY	3
CHEMISTRY 111, GENERAL	3
FN 127, MAN & NUTRITION	3
HEEd. 120, INTRO. TO H. EC.	1
PHYSICAL ED. 001A, B	0
2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
PSYCHOLOGY 101, GENERAL	3
CHEMISTRY 112, GENERAL	3
ZOOLOGY 101, INTRODUCTORY	3
FN 130, FOOD SCIENCE & PREP.	3
ONE OF THE FOLLOWING: ART 120, PHILOSOPHY 105, 125, 110, 243, OR MUSIC 101	3
PHYSICAL ED. 002A, B	0

MAJOR IN FASHION MERCHANDISING

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
SCIENCE OR MATH	3
SOCIOLOGY 101, INTRODUCTORY	3
LANGUAGE	3
HEEd. 120, INTRO. TO H. EC.	1
TCEA 123, ART FOR LIVING	3
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
SCIENCE OR MATH	3
PSYCHOLOGY 101, GENERAL	3
LANGUAGE	3
FN 127, MAN & NUTRITION	3
TCEA 124, TEXTILES I	3
PHYSICAL ED. 002A, B	0

MAJOR IN SECONDARY EDUCATION AND EXTENSION

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
SPEECH 101, ORAL COMMUNICATION	2
CHEMISTRY 111, GENERAL	3
FN 127, MAN & NUTRITION	3
SOCIOLOGY 101, INTRODUCTORY	3
HEEd. 120, INTRO. TO H. EC.	1
PHYSICAL ED. 001A, B	0
2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
PSYCHOLOGY 101, GENERAL	3
CHEMISTRY 112, GENERAL	3
MATH, 111, INTRODUCTORY	3
TCEA 124, TEXTILES I	3
PHYSICAL ED. 002A, B	0

MAJOR IN CHILD DEVELOPMENT

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
FOREIGN LANGUAGE OR PROFICIENCY	3
PSYCHOLOGY 101, GENERAL	3
FN 127, MAN & NUTRITION	3
SPEECH 101, ORAL COMMUNICATION	2
HEEd. 120, INTRO. TO H. EC.	1
PHYSICAL ED. 001A, B	0
2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
FOREIGN LANGUAGE OR PROFICIENCY	3
SOCIOLOGY 101, INTRODUCTORY	3
TCEA 123, ART FOR LIVING	3
ZOOLOGY 101, INTRODUCTORY	3
ELECTIVE	3
PHYSICAL ED. 002A, B	0

SCHOOL OF NURSING

SCHOOL OF NURSING

1st Semester	Credits
ENGLISH 111, ENGLISH COMPOSITION	2
CHEMISTRY 111, GENERAL	3
PSYCHOLOGY 101, GENERAL	3
SOCIOLOGY 101, INTRODUCTION	3
ELECTIVE*	3
SPEECH 101**, ORAL COMMUNICATION	2
PHYSICAL ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112, ENGLISH COMPOSITION	2
CHEMISTRY 112, GENERAL	3
ZOOLOGY 101, INTRODUCTORY	3
ELECTIVE*	3
SPEECH 101**, ORAL COMMUNICATION	2
NURSING 100, INTRODUCTION	3
PHYSICAL ED. 002A, B	0

*Elective chosen from: History, Government or Economics. Students who wish to elect a foreign language may do so providing the basic requirement of six elective credits in the social sciences is fulfilled. If a language is elected, intermediate proficiency is required.

**May be taken either semester.

SCHOOL OF PHYSICAL EDUCATION

PHYSICAL EDUCATION FOR MEN

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
HUMANITIES, ELECTIVE	3
PE 121 INTRO. TO PHYS. ED.	3
PE 123 PRINC. OF HEALTH ED.	3
PE 105 SKILLS & TECHNIQUES (LACROSSE — GYMNASTICS)	1
Elect One	
CHEMISTRY 111	3
BOTANY 100	3
ZOOLOGY 101	3
2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
SPEECH 101, COMMUNICATION	2
SOCIAL SCIENCE ELECTIVE	3
PE 122 FIRST AID & SAFETY	3
PE 106 SKILLS & TECHNIQUES (CYM — BADMINTON — VOLLEYBALL)	1
Elect One	
CHEMISTRY 112	3
BOTANY 100	3
ZOOLOGY 101	3

PHYSICAL EDUCATION FOR WOMEN

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
HISTORY 100, MOD. EUROP. CIVIL.	3
PSYCH. 101, GENERAL	3
WPE 110, HEALTH FOR ADULTS	2
WPE, 105, INTRODUCTION TO PHYSICAL EDUCATION	2
WPE 111, SKILLS	1
ELECTIVE	3

2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
SPEECH 101, COMMUNICATION	2
HISTORY 101, MODERN EUROPEAN CIVIL	3
ZOOLOGY 101, INTRODUCTORY	3
WPE 106, INTRODUCTION TO THE CHILD THROUGH PHYSICAL EDUCATION	2
WPE 112, SKILLS	1
ELECTIVE	3

Chemistry 111 and 112 are required if students have not had chemistry in high school. Others may select from chemistry, physics, microbiology or foreign language.

RECREATION

1st Semester	Credits
ENGLISH 111, COMPOSITION	2
SPEECH 101	2
BOTANY 100, INTRO. BOTANY	3
GOVT. 100, AMERICAN GOVT.	3
HUMANITIES ELECTIVE	3
REC. 101, INTRO. TO REC.	3
GEN. PHYS. ED. 001A, B	0
MILITARY OR AIR SCIENCE 111 (MEN)	1

2nd Semester	Credits
ENGLISH 112, COMPOSITION	2
STATISTICS 121	3
ZOOL. 101, INTRO. ZOOL.	3
SOC. 101, INTRO. TO SOC.	3
M. P. E. 122, FIRST AID & SAFETY	3
REC. 111, SOC. REC.	2
GEN. PHYS. ED. 002A, B	0
MILITARY OR AIR SCIENCE 112 (MEN)	1

DEPARTMENT OF PUBLIC HEALTH

PUBLIC HEALTH

1st Semester	Credits
ENGLISH 111	2
SPEECH 101, I OR II*	2
MATHEMATICS 111 OR 123**	3
CHEMISTRY 111, GENERAL	3
ZOOLOGY 101	3
PSYCHOLOGY 101 OR SOCIOLOGY 101	3
PHYS. ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101, I OR II*	2
MATHEMATICS 112, OR 124*	3
CHEMISTRY 112, GENERAL	3
ZOOLOGY 135 OR ELECTIVE	3
PSYCHOLOGY 101 OR SOCIOLOGY 101	3
PHYS. ED. 002A, B	0

MEDICAL TECHNOLOGY

1st Semester	Credits
ENGLISH 111	2
SPEECH 101, I OR II*	2
CHEMISTRY 111, GENERAL	3
BOTANY 100, OR ZOOLOGY 101	3
FOREIGN LANGUAGE***	3
MATHEMATICS 111 OR 123** OR ELECTIVE	0
PHYS. ED. 001A, B	0

2nd Semester	Credits
ENGLISH 112	2
SPEECH 101, I OR II*	2
CHEMISTRY 112, GENERAL	3
BOTANY 100 OR ZOOLOGY 101	3
FOREIGN LANGUAGE***	3
MATHEMATICS 112, OR 124** OR ELECTIVE	3
PHYS. ED. 002A, B	0

*May be taken either semester.

**On basis of placement tests and interest in advanced science.

***If a language is elected, intermediate proficiency is required.

DIVISION OF MIL + AIR SCI

DEPARTMENT OF MILITARY SCIENCE (GMS)

1st Semester	Credit
MS 111	1
INTRODUCTION TO MILITARY SCIENCE	

2nd Semester	Credits
MS 112	1
INTRODUCTION TO MILITARY SCIENCE	

DEPARTMENT OF AIR SCIENCE

1st Semester	Credits
Air Science 111	1
FUNDAMENTALS OF MILITARY SYSTEMS II	

2nd Semester	Credits
Air Science 112	1
FUNDAMENTALS OF MILITARY SYSTEMS II	



WHERE TO WRITE FOR FURTHER INFORMATION

- ACADEMIC AFFAIRS • Oswald Tipppo, *Provost*
 ADMISSIONS • William D. Tunis, *Dean of Admissions*
 EXPENSE, PAYMENTS • Kenneth W. Johnson, *Treasurer*
 HEALTH SERVICES • Dr. Robert W. Gage, *Director*
 HOUSING • John C. Welles, *Director of Housing*
 MEN'S AFFAIRS • Robert S. Hopkins, *Dean of Men*
 PLACEMENT AND FINANCIAL AID SERVICES (Loans & Scholarships) • Robert J. Morrissey, *Director*
 RECORDS AND TRANSCRIPTS • William Starkweather, *Registrar*
 STOCKBRIDGE SCHOOL OF AGRICULTURE • Fred P. Jeffrey, *Director*
 STUDENT AFFAIRS • William F. Field, *Dean of Students*
 SUMMER SESSIONS • William C. Venman, *Director*
 WOMEN'S AFFAIRS • Helen Curtis, *Dean of Women*

All correspondence concerning the Amherst campus should be addressed to the appropriate office, University of Massachusetts, Amherst, Massachusetts.

All correspondence concerning the Boston campus should be addressed to 100 Arlington Street, Boston, Massachusetts.



MEMBERS OF THE COMMISSION

Frank L. Boyden, <i>Deerfield</i>	Louis M. Lyons, <i>Cambridge</i>
Harry D. Brown, <i>North Chatham</i>	John J. Maginnis, <i>Worcester</i>
Edmund J. Croce, <i>Worcester</i>	Calvin H. Plimpton, <i>Amherst</i>
Dennis M. Crowley, <i>Boston</i>	George L. Pumphret, <i>Dorchester</i>
Fred C. Emerson, <i>Agawam</i>	Mrs. George R. Rowland, <i>Boston</i>
Robert D. Gordon, <i>Lincoln</i>	Martin Sweig, <i>Winthrop</i>
John W. Haigis, Jr., <i>Greenfield</i>	Hugh Thompson, <i>Milton</i>
Joseph P. Healey, <i>Arlington</i>	Frederick S. Troy, <i>Boston</i>
Most Reverend Christopher J. Weldon, <i>Springfield</i>	

His Excellency John A. Volpe, *Governor of the Commonwealth*
John W. Lederle, *President of the University*
Alfred L. Frechette, *Commissioner of Public Health*
Owen B. Kiernan, *Commissioner of Education*
Charles H. McNamara, *Commissioner of Agriculture*
Harry C. Solomon, *Commissioner, Department of Mental Health*

His Excellency John A. Volpe, *Governor of the Commonwealth, President*
Frank L. Boyden, *Chairman*
Robert J. McCartney, *Secretary*
Kenneth W. Johnson, *Treasurer*

