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General Information  
Bulletin

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## FOREWORD

The General Information Bulletin has been prepared for the prospective undergraduate to acquaint the student with all phases of the University of Massachusetts.

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VOLUME LII

AUGUST, 1960

NUMBER III

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# CALENDAR

1960

## September

- 12 — Monday. Registration.
- 13 — Tuesday. Classes begin at 8 a.m.

## October

- 12 — Wednesday. Columbus Day. No classes.

## November

- 5 — Saturday. Marks close for mid-semester reports.
- 11 — Friday. Veterans' Day. No classes.
- 15 — Tuesday. Friday classes will be held.
- 22 — Tuesday. Thanksgiving holiday begins after last class.
- 28 — Monday. Classes resume at 8 a.m.
- 29 — Tuesday. Counseling Day. No classes.

## December

- 17 — Saturday. Classes stop at noon for Christmas holiday.

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## January

- 3 — Tuesday. Classes resume at 8 a.m.
- 11 — Wednesday. Last day of class meetings.
- 12 — Thursday. Reading day.
- 13 — Friday. Final examinations begin at 8 a.m.
- 21 — Saturday. Final examinations close at 5 p.m.
- 30 — Monday. Registration.
- 31 — Tuesday. Classes begin at 8 a.m.

## February

- 22 — Wednesday. Washington's Birthday. No classes.
- 23 — Thursday. Wednesday classes will be held.

## March

- 25 — Saturday. Marks close for mid-semester reports.
- 30 — Thursday. Spring vacation begins after last class.

## April

- 10 — Monday. Classes resume at 8 a.m.
- 19 — Wednesday. Patriot's Day. No classes.

## May

- 2 — Tuesday. Counseling Day. No classes.
- 20 — Saturday. Classes end at noon.
- 22 — Monday. Final examinations begin at 8 a.m.
- 29 — Monday. Final examinations close at 5 p.m.
- 30 — Tuesday. Memorial Day. No classes.

## June

- 2-4 — Friday through Sunday. Commencement.

Correspondence regarding various phases of the University program should be directed as follows:

**Academic Affairs**

SHANNON McCUNE, *Provost*

**Admission, Registration, and Transcripts**

MARSHALL O. LANPHEAR, *Registrar*

**Expenses, Payments**

ROBERT E. HEYWOOD, *Assistant Treasurer*

**Extra-Curricular Activities**

WILLIAM D. SCOTT, *Director, Student Union*

**Graduate School**

GILBERT WOODSIDE, *Dean*

**Housing**

HERBERT RANDOLPH, *Housing Supervisor*

**Loans**

EMORY GRAYSON, *Director of Placement*

**Men's Affairs**

ROBERT S. HOPKINS, *Dean of Men*

**Publications, News**

WILLIAM DEMINOFF, *Director of Publications and News Editor*

**Scholarships**

FRED JEFFREY, *Associate Dean of the College of Agriculture*

**Short Courses**

FRED JEFFREY

**Stockbridge School of Agriculture**

FRED JEFFREY

**Student Employment**

EMORY GRAYSON, *Director of Placement*

CAROL BURR CORNISH, *Placement Officer for Women*

ROBERT J. MORRISSEY, *Placement Officer for Men*

**Summer Sessions**

SHANNON McCUNE, *Provost*

**Veterans' Affairs**

GEORGE EMERY, *Veterans' Coordinator*

**Women's Affairs**

HELEN CURTIS, *Dean of Women*

## BOARD OF TRUSTEES

FRANCIS ROLAND McDERMOTT, A.B. (College of the Holy Cross), Wrentham	
HARRY DUNLAP BROWN, B.S. (University of Massachusetts), Billerica	1961
JOHN WILLIAM HAIGIS, JR., B.A. (Amherst College), Greenfield	1961
PHILIP FERRY WHITMORE, B.S. (University of Massachusetts), Sunderland	1962
ROBERT SULLIVAN, A.B. (Harvard University), LL.B. (Boston College), Brookline	1962
WILLIAM MICHAEL CASHIN, A.B. (Boston College), Milton	1963
JOSEPH P. HEALEY, A.B. (Harvard University), M.B.A. (Harvard Business School), LL.B. (Harvard Law School), Boston	1963
ERNEST HOFTYZER, B.S. (Ohio State University), Wellesley	1964
ALDEN CHASE BRETT, B.S., LL.D. (University of Massachusetts), Belmont	1964
VICTORIA SCHUCK, A.B., M.A., PH.D. (Stanford University), South Hadley	1965
J. JOHN FOX, LL.B. (Boston University), Boston	1965
DENNIS MICHAEL CROWLEY, B.S., M.S. (University of Massachusetts), LL.B. (Boston College), Boston	1966
GEORGE L. PUMPHRET, Dorchester	1967
FRANK LEAROYD BOYDEN, A.B., A.M. (Amherst College), A.M. (Williams College, Yale University), sc.D. (Colgate University), PH.D. (New York State College for Teachers), LL.D. (Wesleyan University, Bowdoin College, Kenyon College, Harvard University, University of Massachusetts), L.H.D. (Amherst College, Williams College, Princeton University), LITT.D. (Tufts College), Deerfield	1967



## TRUSTEES

### Members Ex Officio

HIS EXCELLENCY FOSTER FURCOLO, B.A., LL.B. (Yale University),  
Boston, *Governor of the Commonwealth.*

OWEN B. KIERNAN, B.S. (Bridgewater State Teachers College), ED.M.  
(Boston University), ED.D. (Harvard University), *Commissioner of  
Education.*

CHARLES HENRY McNAMARA, *Commissioner of Agriculture.*

### Officers of the Board

HIS EXCELLENCY FOSTER FURCOLO, B.A., LL.B. (Yale University),  
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FRANK LEAROYD BOYDEN, A.B., A.M. (Amherst College), A.M. (Williams  
College, Yale University), SC.D. (Colgate University), PH.D. (New  
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Bowdoin College, Kenyon College, Harvard University, Uni-  
versity of Massachusetts), L.H.D. (Amherst College, Williams Col-  
lege, Princeton University), LITT.D. (Tufts College), Deerfield,  
*Chairman.*

JOHN GILLESPIE, A.B. (East Central State College), M.A. (University  
of Oklahoma), PH.D. (University of Texas), Amherst, *Secretary.*

KENNETH WILLIAM JOHNSON, B.S. (University of Vermont), Amherst,  
*Treasurer.*

## OFFICERS OF ADMINISTRATION

<b>Provost</b> SHANNON McCUNE	South College
<b>Secretary</b> JOHN GILLESPIE	South College
<b>Treasurer</b> KENNETH WILLIAM JOHNSON	South College
<b>Registrar</b> MARSHALL OLIN LANPHEAR	South College
<b>Librarian</b> HUGH MONTGOMERY	Goodell Library
<b>Dean of Graduate School</b> GILBERT LLEWELLYN WOODSIDE	South College
<b>Dean of Men</b> ROBERT STODDART HOPKINS, JR.	South College
<b>Dean of Women</b> HELEN CURTIS	South College
<b>Director of Publications and News Editor</b> WILLIAM DEMINOFF	South College
<b>Acting Director of Experiment Station</b> FRED PAINTER JEFFREY	Stockbridge Hall
<b>Acting Director of Extension Service</b> FRED PAINTER JEFFREY	Stockbridge Hall
<b>Director of Stockbridge School</b> FRED PAINTER JEFFREY	Stockbridge Hall
<b>Director of Health Services</b> ROBERT W. GAGE, M.D.	Infirmery
<b>Director of Placement</b> ROBERT J. MORRISSEY	South College
<b>Alumni Secretary</b> EVAN V. JOHNSTON	Memorial Hall
<b>Student Union Director</b> WILLIAM DAVID SCOTT	Student Union

## UNDERGRADUATE MAJORS

### College of Arts and Sciences

Art	Mathematics
Astronomy (Four College Cooperation Program)	Music
Bacteriology	Philosophy
Botany	Physics
Chemistry	Pre-Dental
Economics	Pre-Medical
English	Pre-Veterinary
Geology	Psychology
German and Russian	Public Health
Government	Romance Languages
History	Sociology and Anthropology
Journalism	Speech
	Zoology

### College of Agriculture

Agricultural Economics	Food Technology
Agricultural Engineering	Forestry
Agromony	Landscape Architecture
Agrostology	Landscape Operations
Animal Science	Olericulture
Dairy Technology	Plant Pathology
Entomology	Pomology
Floriculture	Poultry Husbandry
Food Distribution	Wildlife Management
Food Management	

### School of Business Administration

Accounting	Personnel Management and Industrial Relations
General Business	Production Management
Business Administration and Economics	Marketing
Finance	Merchandising
General Management	

### School of Education

Education	Elementary Education
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## UNDERGRADUATE MAJORS

### **School of Engineering**

Chemical Engineering

Civil Engineering

Electrical Engineering

Industrial Engineering

Mechanical Engineering

### **School of Home Economics**

Child Growth and Development

Foods, Nutrition and Institutional Administration

Pre-Research in Foods and Nutrition

Home Economics Education and Extension

Merchandising

### **School of Nursing**

General Nursing

### **School of Physical Education**

Physical Education for Men

Physical Education for Women

Recreation Leadership

## GENERAL INFORMATION

The University of Massachusetts is the state university of the Commonwealth, founded under the provisions of the Morrill Land Grant Act of Congress of 1862. Representative Morrill envisioned the bill as "adding new securities to the perpetuity of republican institutions . . . It will prove a blessing to the whole people now and for ages to come."

Part of the great national resource of public higher institutions made possible through the Land Grant Bill, the University of Massachusetts serves Massachusetts youth in their educational needs beyond high school.

Situated in one of the most picturesque sections of the state, at Amherst, the University makes its contribution to the educational and cultural heritage maintained in the Connecticut Valley by Amherst, Smith and Mount Holyoke Colleges.

The trustees of Massachusetts Agricultural College were incorporated in 1863 and when the college was formally opened in 1867, there were four teachers and four wooden buildings. From this beginning, the institution grew steadily both in students and scope. Reflecting the broadening interests of its curriculum, the Great and General Court of Massachusetts authorized a second name, Massachusetts State College, in April, 1931. The Bachelor of Arts degree was awarded in 1939 by trustee vote, in addition to the Bachelor of Science degree. In May, 1947, the Legislature approved the present name, University of Massachusetts.

The University of Massachusetts, located in the town of Amherst, has a campus of approximately 700 acres. In addition to the central campus, the University owns one area of 755 acres, six miles north of the campus on Mount Toby. An additional tract includes 1200 acres of forest land on Mount Lincoln, several miles to the east of the campus. These holdings are administered by the Department of Forestry as demonstration forests.

The University also operates a horticultural field station at Waltham and a cranberry field station at East Wareham.

The growth of the University has been carefully planned, with provisions for buildings and facilities to accommodate an enrollment of 10,000 by 1965. The expansion has been charted in a publication, The Master Plan. With much of this Plan already fulfilled, the University stands as a large complex of modern instructional and dormitory buildings in a beautiful valley setting.

## GENERAL INFORMATION

The total resources of the University constitute the Commonwealth's major facility of public higher education and research.

## BRANCHES OF INSTRUCTION

### The Undergraduate College

The University offers four-year undergraduate instruction leading to the following degrees: Bachelor of Science, Bachelor of Arts, Bachelor of Science in Chemical, Civil, Electrical and Mechanical Engineering, Bachelor of Business Administration and Bachelor of Vocational Agriculture.

This instruction is assigned to the College of Arts and Sciences, the College of Agriculture, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing and Physical Education. The aim of the four-year course is to give as high a degree of proficiency in some particular branch of learning as is possible without sacrificing the breadth, knowledge, and training which should characterize a well-rounded college education.

The degree of Bachelor of Science is conferred upon those candidates who complete the curriculum requirements of the freshman and sophomore years, and 60 junior-senior credits including the specialization and distribution requirements as specified by the Faculty of Arts and Sciences. The Bachelor of Science degree is awarded also to students who complete the curriculum requirements of the College of Agriculture, the Schools of Home Economics, Nursing, and Physical Education.

The degree of Bachelor of Arts is awarded to all candidates who complete the curriculum requirements of the freshman and sophomore years in the College of Arts and Sciences and 60 junior-senior credits including the major and distribution requirements of the College.

All graduates from the School of Engineering receive the appropriate degrees of Bachelor of Science in Chemical Engineering, Civil Engineering, Electrical Engineering or Mechanical Engineering.

All graduates from the School of Business Administration receive the degree of Bachelor of Business Administration.

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 or horticulture. Upon the completion of their course they will be granted a Bachelor of Vocational Agriculture degree.

## GENERAL INFORMATION

### The Graduate School

Graduate work leading to the Doctor of Philosophy degree may be taken in the following fields: Agronomy, Animal Science, Bacteriology, Botany, Chemistry, Economics, Entomology, Food Sciences, Food Technology, Government, Plant Pathology, Poultry Science, Psychology, and Zoology.

The following departments offer major work leading to a Master's degree: Agricultural Economics, Agricultural Engineering, Agronomy, Bacteriology, Botany, Business Administration, Chemistry, Chemical Engineering, Civil Engineering, Dairy and Animal Science, Economics, Education, Electrical Engineering, English, Entomology and Plant Pathology, Floriculture, Food Technology, Forestry, Geology, German, Government, History, Home Economics, Horticulture, Landscape Architecture, Mathematics, Mechanical Engineering, Olericulture, Philosophy, Physics, Pomology, Poultry Science, Psychology, Public Health, Romance Languages, Sociology, Wildlife Management, Zoology.

The general requirements of the Graduate School regarding admission, residence, credits, tuition, etc., together with specific information concerning details of interest to prospective students, are outlined in a separate bulletin, which may be obtained upon request from the Dean of the Graduate School.

### Summer Sessions

An expanded summer program enables the student to earn nearly the equivalent of a full semester's work. The sessions are open to freshmen who wish to begin their college education immediately following graduation from high school. The program also serves the needs of students currently enrolled in colleges; graduate students; and professional workers seeking courses in specialized fields. An additional bulletin describing the entire summer program is available from the Director of the Summer Sessions.

### The Stockbridge School of Agriculture

The University, through its Short Course division, as a special service under the Land-Grant Act by which it was established, provides a complete non-degree program of two-year technical and vocational courses in the fields of agriculture and horticulture.

## GENERAL INFORMATION

This School was organized at the University in 1918 under the name of "The Two-Year Course in Practical Agriculture." Its purpose was to meet the demand for shorter courses in agriculture which might be taken by high school graduates who could not satisfy college entrance requirements or who were unable to take the four-year college course. In 1928 the School was given its present name in honor of Levi Stockbridge, first professor of agriculture at the University and its fifth president.

This program trains men and women primarily for the practice of farming or associated agricultural industries. A diploma is awarded for satisfactory completion of the course.

As the two-year program is now organized a student may choose any one of 12 vocational courses including dairy farming, dairy manufactures or milk plant operation; poultry farming; arboriculture or the care of trees; fine turf maintenance for golf courses, cemeteries, parks, and playgrounds; commercial flower growing, both retail and wholesale; food management for clubs, hotels, and restaurants; commercial fruit farming; ornamental horticulture or landscape gardening; commercial vegetable farming; applied forestry for timber growing and forest products industries; and food distribution, including retail merchandising.

On-the-job placement training is required of all first year students in the second semester for a period of three to five months, depending on type of employment. No student can earn a diploma of graduation without this applied training experience. Wages earned can pay a large part of second year expenses if the student is forced to economize.

Limited enrollment quotas in each major course make necessary early filing of application. No formal entrance examinations are required for non-degree short courses.

A catalogue, giving complete description of all two-year courses offered in The Stockbridge School of Agriculture, as well as full details on estimated costs, employment opportunities in each field, and entrance arrangements is available. Application form is printed in the catalogue. Write to Director of The Stockbridge School, University of Massachusetts, Amherst.

### Other Non-Degree Short Courses

Other short courses, varying in length from one to ten weeks, furnish supplementary training for city and town sanitary inspectors, tree wardens and city foresters, golf course greenskeepers, and skilled workers in dairy and ice cream plants. A certificate is presented upon the satisfactory completion of the course.



## GENERAL INFORMATION

### Research and Regulatory Services

The University of Massachusetts serves the fields of agriculture and horticulture through its Experiment Station, which provides research and regulatory services. Experiment stations were established in all states as the need for development of practical information on subjects relating to agriculture became apparent. Through the efforts of experiment stations a fund of scientific knowledge applicable to agriculture and horticulture has been accumulated, and research workers in the experiment stations continue to contribute to this knowledge by constant research and experimentation.

At the University of Massachusetts, the Experiment Station service has expanded until it now deals with problems in the following fields of specialization: Agricultural Economics and Farm Management, Agronomy, Bacteriology, Chemistry, Dairy and Animal Science, Engineering, Entomology and Plant Pathology, Horticulture, Floriculture, Food Technology, Nutrition, Olericulture, Pomology, Poultry Science, and Veterinary Science. Most of the research activities of the University of Massachusetts are undertaken at the main Experiment Station at Amherst. There are, however, two substations, one at Waltham, devoted largely to the problems of horticulture as applied to olericulture, floriculture, and nursery culture, and one at East Wareham, where attempts are in progress to solve the problems of the cranberry and blueberry growers.

In addition to the work described above, the administration of certain regulatory services, pertaining to the sale of feeds, fertilizers, and seeds and to the use of dairy glassware, is also assigned to the Experiment Station which is equipped with the necessary laboratory facilities and personnel for that purpose.

### Co-operative Extension Service

The Massachusetts Extension Service is a co-operative teaching effort between the United States Department of Agriculture, the University of Massachusetts and the several counties of the State. The work of the Extension Service is carried on through unified teaching programs in all parts of Massachusetts. The Extension Service assists the people of the farm, the home, and the rural communities to improve agriculture, home making, and rural life. The University of Massachusetts is the State Extension Service headquarters. Extension educational teaching plans are made in council with the people who determine their problems and help to suggest methods and practices for their solution.

## GENERAL INFORMATION

The Extension effort was brought about by the Smith-Lever Law, passed by Congress on May 8, 1914. Since that time, the service has grown to a staff of over 100 State and County workers who conduct an educational program in all phases of agriculture and home making among the adults and young people (4-H Club work) of the State. All types of methods, including subject matter, meetings, demonstrations, farm and home visits, publications, visual aids, and radio are used in carrying out this educational program directly in the farm and rural areas of the State. During the war emergency, the Extension Service extended its home food production and preservation program to the urban areas.

## ADMISSION

Applications for admission may be obtained by writing the Registrar of the University. Candidates are advised to file their applications early in the senior year and certainly not later than March 1 of the year they plan to enter.

Qualified applicants are admitted at the beginning of the fall and spring semesters and at the beginning of the ten weeks summer session. Since there are many more qualified applicants than can be admitted, however, preference has to be given to those with the highest ratings.

All applicants for admission except veterans and candidates for the Bachelor of Vocational Agriculture degree must take the Scholastic Aptitude Test given by the College Entrance Examination Board. In addition, the University reserves the right to require three Achievement Tests administered by the same Board if the applicant's scholastic record includes several subjects below the college recommending grade of the school. Each applicant will be informed of the procedure he must follow at the time his application is acknowledged.

### Methods

#### A. *High School Seniors*

High school seniors are advised to file their applications early in the senior year. The Scholastic Aptitude Test may be taken on any of the scheduled dates. The January date is recommended except for those applying for early acceptance. The May date is usually too late for seniors, but is appropriate for juniors taking the test for guidance purposes.

Some applicants have a definite first preference for the University and have records that deserve early consideration. Such applicants will be accepted early in their senior year under the following conditions. They must be taking the usual college preparatory course in high school and maintaining the college recommending grade of the school in all of their courses. They must take the College Board Scholastic Aptitude Test in the junior year, preferably in May, and make a score satisfactory to the University. They must indicate the University as their first preference.

Under these conditions the University will be glad to accept such students as indication of excellent achievement in high school

## ADMISSION

and to reduce some of the anxiety that an applicant feels during the senior year while waiting for action usually taken in the spring. In this way, too, the burden of multiple applications on high school principals and college admissions officers may be lessened.

### B. *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 make 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.

### C. *Veterans*

Veterans are not required to take the Scholastic Aptitude Test. Instead, they must take entrance examinations in algebra, English and a College Qualification Test. These are administered by the University Testing Service in January, June 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.

### D. *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:

- a. They are unqualifiedly recommended by the Vocational Division of the Department of Education as *bona fide* Vocational Graduates with superior ranks; and
- b. That they can present at least 16 units of certified entrance credits, approved as to quality and quantity by the State Department of Vocational Education; and
- c. That 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.

### E. *Transfer*

A limited number of transfers from approved colleges may be admitted. Since applicants for such transfer exceed the number that can be admitted, 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. The University reserves the right to require the College Board Achievement Tests also, if the applicant's records make such advisable. Information in regard to transfer may be obtained by writing the Registrar.

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:

- a. Mathematics
- b. Science
- c. Foreign Language
- d. History and Social Studies
- e. 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.

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

## **ADMISSION**

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 are also strongly recommended.

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.

In high schools organizing agricultural club work under the supervision and rules of the Junior Extension Service of the University, one credit is granted for each full year of work approved by state leaders.

Candidates of exceptional ability and promise may be considered for admission even though some of the prescribed courses were not included in their high school program.

### **College Entrance Examination Board Advanced Placement**

Successful completion in secondary school of courses approved by the College Entrance Examination Board Advanced Placement Program, or the equivalent as approved by the University, will be regarded as meeting the equivalent requirement and will be accorded credit toward graduation.

### **Physical Examination**

Physical examination by their local doctor 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 is required.

### **Veterans' Affairs**

The Veterans' Coordinator is a member of the Placement Service.

Veterans enrolling for the first time must file a Certificate of Eligibility with the Placement Office prior to or at registration. All veterans should clear their affairs through the Placement Service.

## EXPENSES

### University Fees

Expenses vary from approximately \$970 to \$1000 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 to earn. A student is advised to have a definite plan for meeting the expenses of the first year before entering.

Freshmen entering the School of Engineering should be prepared to meet an expense of approximately \$45 for drawing equipment and a slide rule.

The following estimate of a year's expenses, based upon last year's costs, includes only those items which are strictly college 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 college dormitory or private home (approx.)	200.00
Board at college Dining Halls (approx.) . . . . .	420.00*
Athletic Fee . . . . .	20.00
Student Union Fee . . . . .	20.00
Student Tax (approx.) . . . . .	24.00
Student Health Insurance, 12 months' coverage (optional). . . . .	18.00
Books, stationery, and other supplies (estimate) . . . . .	100.00
	\$1002.00

### 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 college dormitories (approx.) . . . . .	100.00
Board at college Dining Halls (approx.) . . . . .	210.00*
Athletic Fee . . . . .	10.00
Student Tax (approx.) . . . . .	12.00
Student Union Fee . . . . .	10.00
Military Uniform Deposit (men only) . . . . .	30.00
Physical Education Equipment Fee (men only) . . . . .	10.00
Student Health Insurance, 12 months' coverage (optional). . . . .	18.00
Books, stationery, and other supplies (estimate) . . . . .	60.00
	\$560.00

\* Above plan for 7 days; 5-day plan available for approximately \$340.00 per year or \$170.00 per semester.

## EXPENSES

The above are only approximate figures. A bill will be rendered to the parent of each student prior to the opening of the University.

### 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 at 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.

### Board

The University provides three dining halls for students at Butterfield House, Greenough House and University Dining Commons. The dining halls at Butterfield and Greenough dormitories are intended primarily to provide for students housed in that area, including residents of Chadbourne, Mills and Brooks Houses.

All freshmen, sophomores and juniors residing in University dormitories will be required to board at University dining halls,



## EXPENSES

except that such students who are members of fraternities or sororities are permitted to board at their respective fraternities or sororities.

Any student who wishes may board at University dining halls on the ticket plan or cash basis.

### Military Uniform

All freshmen students taking military drill are required to make a deposit of \$30 for the uniform at the time the first semester bill is paid. Charges for loss or damage of the government issued uniforms will be deducted from this deposit. Should the amount on deposit drop below \$20, because of charges, the student will be required to make additional deposit to restore the balance to \$30. The deposit will be refunded to the student less any charges after clearance from the Air Force or the Army after the student has completed the requirements of the basic course, has been excused from the course or has left the University.

### Student Activity Tax

This tax, authorized by vote of the undergraduate students with the approval of the Board of Trustees, provides each student with the *Collegian*, the student newspaper; *Index*, University yearbook; student government, class and other activities.

## PAYMENTS

### Advance Payment

New students will be expected to make an advance payment of \$15 to the Treasurer of the University as soon as they are notified by the Registrar that they are accepted for admission. This will be considered as first payment on registration fee, which will be due at time of matriculation in September. It is not refundable and will be considered as payment for admissions and registration expense if the student does not matriculate.

A Certificate of Residence form furnished by the University must be properly filled out by the parent and the town or city clerk and returned with the \$15 advance payment.

### Summer Orientation Fee

Members of the incoming freshman class attending the summer orientation program will pay a non-refundable fee of \$15 to cover the cost of meals, housing, testing and counseling.

## **FINANCIAL AID**

### **When Payments Are Due**

In accordance with policy established by the Board of Trustees, all charges for tuition, fees, board, and room rent in University Dormitories are due and payable seven 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 registration charges are paid.

### **Veterans' Information**

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

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

## **FINANCIAL AID**

Scholarships, loans, and part-time employment are available for a limited number of needy and deserving students.

### **Aid for Freshman Year**

Freshmen are eligible for scholarships and part-time employment. A freshman also becomes eligible for assistance from loan funds after satisfactorily completing one semester of academic work. Scholarship application blanks may be secured from Fred P. Jeffrey, Stockbridge Hall, and should be filed by March 15. Part-time employment application forms may be obtained from the Director of Placement Service and filed after a candidate has been accepted for admission.

Because of the time required for preparation of studies, few students should plan to spend more than ten hours per week in part-time employment.

## SCHOLARSHIPS AND LOANS

Scholarships are awarded only to needy and deserving students of high character whose habits of life are economical and whose scholastic records are satisfactory; that is, at least a 2.5 quality point average. A limited number of scholarships are available to entering freshmen who have made outstanding records in high school.

Scholarships are paid in installments at the beginning of each semester in the form of a credit on the student's bill. A scholarship may be discontinued at the close of any semester.

If the scholarship student withdraws from the University, any refund of University fees or charges must first be applied to reimburse the scholarship fund for the full amount of the scholarship received by the student for the semester.

Applications for scholarships may be obtained from Fred P. Jeffrey, Stockbridge Hall, and must be completed and returned by March 15 to be considered.

### GENERAL SCHOLARSHIPS

**COMMONWEALTH SCHOLARSHIPS.** The Commonwealth of Massachusetts annually provides 25 scholarships of not more than \$250 for members of each of the four undergraduate classes of the University. Upperclass students may obtain application forms from Fred Jeffrey, Stockbridge Hall. Entering freshmen may obtain application forms at the Registrar's Office.

### LOANS

Through the generosity of friends of the University, funds have been donated to provide loans for a limited number of students of the three upper classes to assist in paying tuition or other college expenses. These loans are granted, after proper consideration, to needy students of good scholarship whose habits are economical. All loans are secured by a note endorsed by a responsible party as collateral. In general loans must be paid before graduation. Upon withdrawal from the University, loans automatically become due. On most of the funds interest is charged at the rate of 3% to maturity and 5% thereafter. The Lotta Crabtree Agricultural Fund loans are made without interest. Application for loans should be made to the Placement Service, South College. No loan will be granted in excess of \$200 in any one year.

## **SCHOLARSHIPS**

If funds are available at the beginning of the second semester, loans may be made in exceptional cases to members of the freshman class whose scholastic record is satisfactory and whose budget calculations have been upset through circumstances beyond their control.

### **Higher Education Loan Plan**

Loans up to \$500 per year may also be obtained by students in the three upper classes from the bank of their choice through the Higher Education Loan Plan. Certification of attendance and other information relative to the student's overall record will be submitted to the bank prior to receipt of the loan. Further information can be obtained in the Placement Office.

### **The National Defense Student Loan Program**

Certain funds are available on a loan basis for qualified full-time students under terms of the National Defense Education Act of 1958. Special consideration in the selection of loan recipients is given to students with superior academic backgrounds who wish to teach in elementary or secondary schools, or whose academic background indicates a superior capacity or preparation in science, mathematics, engineering, or a modern foreign language.

# UNIVERSITY REGULATIONS

## Freshman Orientation Program

Members of the incoming freshman class are required to attend a summer orientation program of two and a half days. This is a period of testing, counseling and pre-registration. A series of guidance and placement tests will be given and then scored. The student will be assigned to a faculty counselor who will help him select his courses for the fall semester and plan his schedule of hours. Successful completion of the tests may qualify the student for advanced placement but does not give credit toward graduation.

A special program for parents is arranged for the final day of the session at which time they learn about the tests and the results, the student's proposed courses and schedule for fall semester, and the facilities and opportunities at the University.

## Registration

Every student must report for registration on the appointed day. All late registrants must pay a \$5 fine. No student will be admitted to any class until he has completed the prescribed registration procedure. Changes of courses on the registration card shall be made only by the Registrar's Office.

Any student who does not complete his registration, including payment of semester charges, on the regular registration days will be required to pay a fine of \$5.

No course will be recorded on the permanent records of the University nor will a student receive credit for it, unless such course appears on the registration card for the semester and has been properly countersigned by the instructor.

## 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 is assigned to a faculty adviser at the time of registration. 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 Provost'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

## **REGULATIONS**

students and parents are encouraged to consult with the adviser whenever there are problems regarding studies or personal adjustments to college life.

At the beginning of the second semester of the freshman year each student will discuss his vocational and specialization plans with his adviser. If he can decide definitely upon the department in which he wishes to specialize, and the adviser approves, the student takes his election card to the head of that department for approval. In cases where students are not ready to designate a department of specialization they continue as general majors during the sophomore year under the direction of an adviser assigned by the head of the School in which the student is enrolled. Such general majors must select their field of specialization by the end of the sophomore year.

### **Standards of Deportment**

The customary high standard of college men and women in honor, self-respect, and consideration for the rights of others constitutes the ideal of student deportment.

The privileges of the University may be withdrawn from any student at any time if such action is deemed advisable.

It should be understood that the University, acting through its president or any administrative officer designated by him, distinctly reserves the right, not only to suspend or dismiss students, but also to name conditions under which they may remain in the institution.

Hazing in the sense of the punishment or humiliation of students is not permitted.

### **Student Housing**

It is the policy of the Board of Trustees that all men and women students shall be housed in campus dormitories and be required to eat at University dining halls unless given permission to commute or to live at sorority or fraternity houses. University board is optional for seniors and is available on a cash basis. Sororities and fraternities may furnish regular board to members up to the approved capacity for each house.

Students who are assigned to housing operated by the University are expected to remain in occupancy for the academic year and may not be released sooner except as their places are taken by suitable substitutes.

The University of Massachusetts reserves the right to change room assignments whenever necessary.

## REGULATIONS

Most dormitory rooms are double and are furnished with beds, mattresses, pillows, desks, chairs, and a chest of drawers. Students care for their own rooms and are responsible for any damage.

Dormitories will be 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 turned in 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 dormitory rooms will be responsible for the room rent of the entire semester. Room rent is not refundable.

Room rental charges do not include the several regular school vacation periods. The University reserves the right to utilize student rooms during vacations for conferences and other groups which meet occasionally on the campus.

### Rooms for Women Students

Assignments of rooms in women's dormitories are made by the Office of the Dean of Women. Rooms are available for women students at Arnold, Crabtree, Dwight, Hamlin, Johnson, Knowlton, Leach, Lewis, Mary Lyon and Thatcher Houses.

Under the supervision of the Dean of Women, life in each dormitory is directed by a council of student leaders, advised by a full-time Head of Residence, so that conditions in the residence halls are conducive to study and good living habits. Through the women's branch of the Student Government, the responsibility is put upon each student to live according to her own best standards as well as according to the standards of the group.

Freshman girls will be assigned rooms in the dormitory and will be notified of the assignment prior to the beginning of college.

In the spring of each year, upperclass women have an opportunity to choose rooms for the coming year.

Only students living in their own homes may commute. Upperclass women may apply to the Dean of Women for permission to live in a sorority house, or to earn room and board in a private home.

Dormitories are maintained for undergraduates; graduate women from other countries are also accommodated whenever possible. The Dean of Women's Office maintains a list of rooms in Amherst available for graduate women students.

## **REGULATIONS**

### **Rooms for Men Students**

Dormitory rooms are available for male students at Adams, Baker, Brooks, Butterfield, Chadbourne, Greenough, Hills, Mills, Van Meter, and Wheeler Houses.

Assignment of dormitory rooms will be under the supervision of the Housing Office. Requests for permission to live off campus must be made in writing to the Dean of Men.

A full-time Head of Residence who is a member of the professional staff of the Dean of Men's Office is in charge of each dormitory. While these Heads of Residence are responsible for the enforcement of University rules and regulations, their primary concern is to counsel students. In each dormitory they are assisted by Floor Counselors in maintaining good living and study habits.

Dormitories are governed by an elected Student House Council, advised by the Head of Residence, which gives the students valuable training in dealing with the problems of group living.

### **Rooms for Married Students**

The University cannot guarantee facilities for married students; however, those married students who can be accommodated will be housed in the University apartment units. Assignments are under the direction of the Housing Office and all inquiries should be addressed to that office. Some students may be able to locate rooms or apartments off campus.

### **Automobiles**

Only members of the senior class and students 21 years old or over, commuters and veterans are permitted to have automobiles or other types of automotive equipment on the campus or in the Town of Amherst. Vehicles must be registered with the Campus Police. Driving to and from classes is not permitted. Exceptions may be made in the case of an individual who has a severe physical limitation.



## SPECIAL SERVICES

### Religious Life

The University is concerned in an age of anxiety with the needs for spiritual undergirdings for the educated man. In this day of uncertainty the importance of delving into affairs of the spirit has an equal prominence with searching for knowledge in human relations and scientific truths.

The University gives support to the religious life of its students in various ways. It affords the use of University facilities for student groups of all faiths. It cooperates with the official agencies of the three faiths most largely represented at the University by recognizing the contributions of their privately supported chaplains and by giving them facilities and privileges for their work.

On the campus, the religious life of Catholic students is enriched by the program of the Newman Club, of which Rev. David J. Power is chaplain. Jewish students participate in services and activities sponsored by the B'nai B'rith Hillel Foundation, of which Rabbi Louis Ruchames is the director. Protestant students join in worship and other religious activities planned by the Christian Association, with the guidance of Rev. Albert L. Seely, Protestant chaplain.

Other religious groups such as the Massachusetts Bible Fellowship, the Orthodox Club, the Christian Science Organization, and the Lutheran Club also meet regularly on campus and students interested in their programs are welcome to attend.

The local Protestant and Catholic churches of Amherst provide opportunities for Sunday worship and Sabbath services for Jewish students on Friday evenings are held at the Student Union. Students are encouraged to attend the services of their respective faiths. Several denominations sponsor active student programs centered in the local churches as well, and students are welcome to attend events and join groups sponsored by the denominations.

### Health Service

The Health Service is a separate administrative unit dealing with all matters directly or indirectly influencing or affecting the health of staff members, employees, students, or campus visitors.

The University endeavors to safeguard the health of all students while on the campus. Basic medical attention is provided, including preliminary diagnosis, primary treatment of injuries, and tem-

## **SPECIAL SERVICES**

porary care of the sick. A group of three infirmary buildings and a staff of resident physicians and resident nurses is available to perform these functions.

### **Speech and Hearing Clinic**

A Speech and Hearing Clinic is maintained to assist students with speech and hearing problems. Professional services are provided by qualified speech and hearing therapists. Opportunity for assistance is available for students with various problems including stuttering, articulation problems, foreign dialect, voice disorders, and hearing loss. Interested students may contact the Speech Department for an appointment. Appointments will also be made for students recommended by advisors and faculty members. There is no student fee for services.

### **The Placement Service**

The University maintains a centralized Placement Service, the main function of which is to assist students to secure part-time, summer, or permanent employment and to administer the required Placement Training Program.

The University is keenly interested that each graduate has an opportunity to serve his fellow men in an occupation consistent with his interests, abilities, aptitudes, and education. To assist students to accomplish their objectives, the following aids are available: cumulative student personnel records, occupational information and industrial literature, library, counseling and guidance in job hunting techniques, preparation of credentials and personal data sheets. Personal interviews on campus are arranged with prospective employers.

The Placement Service is the clearing center for all part-time jobs at the University. Students are assisted in obtaining part-time work during the college year and full-time work during the summer vacation. Employment is not guaranteed, but every effort is made to help those students who must work to meet their college expenses. In order to give assistance to as many needy students as possible, the maximum financial aid per student is limited to the equivalent of board. The average earnings of students engaged in part-time work is approximately \$150 per year.

All student loans, veterans' affairs and draft information are also functions of the Placement Service.

### **Publications and News Office**

The University recognizes its obligation to provide the public with accurate information about its educational program. With the rising public interest in higher education, news of the Univer-

## SPECIAL SERVICES

sity is sought by all communications media, including the daily and weekly press, radio and television.

In addition to providing information through mass media, the Publications and News Office maintains contacts with institutions of higher learning throughout the country with exchange of information in professional journals and publications of educational societies.

Daily training in news writing is provided for a limited number of students who report on University activities and prepare copy for general news releases.

The catalogues describing various phases of the academic program of the University are edited in the Publications and News Office.

### Alumni Association

The Associate Alumni is the general alumni organization of the University of Massachusetts. The association maintains headquarters at Memorial Hall, erected by alumni and friends in honor of those men of the University who died in World War I.

The association publishes a magazine, *The Massachusetts Alumnus*, as the alumni publication of the University.

According to its by-laws the corporation is constituted for the purpose of promoting the general usefulness of the University of Massachusetts; of cultivating among its graduates and former students a sentiment of mutual regard; and of strengthening their attachment to their Alma Mater.

Under sponsorship of the U. of M. Building Association, composed of alumni who volunteer their services, 17 dormitories, two faculty apartment buildings and a Student Union Building have been constructed on the campus.

The governing body of the Associate Alumni consists of its officers and a board of directors. Four directors are elected each year and serve a term of four years. All graduating seniors become members of, and contributors to, the association at graduation, according to a tradition set by the Class of 1940.

### University Library Service

With a seven-floor addition to the Goodell Library building completed in 1959, the University Library will be expanded to include a collection of 460,000 volumes; large reading rooms and a reference collection of 15,000 volumes.

The collection includes books and periodicals in the humanities, social science and sciences. Current working collections are provided in departmental collections located in several University buildings adjacent to teaching facilities and laboratories.

## **SPECIAL SERVICES**

### **Audio-Visual Center**

The Audio-Visual Center is organized to help the professional staff through the use of audio-visual materials. The center has libraries of aids, photographs, projectibles, a pool of equipment and provides certain services. About 970 titles are available in a sound motion picture library and a filmstrip library of over 700 titles and 75 slide sets. Technical assistance is available for the preparation of aids for instructional purposes, including recordings, charts and other graphics.

### **Bureau of Government Research**

Bureau of Government Research was established at the University of Massachusetts in 1955. The Bureau is staffed by professional personnel experienced in local government research. Its work consists of research in governmental problems, publication of studies in public administration, conducting training institutes for public officials, providing consultative services to cities and towns and the maintenance of a research library.

### **Hampshire Inter-Library Center**

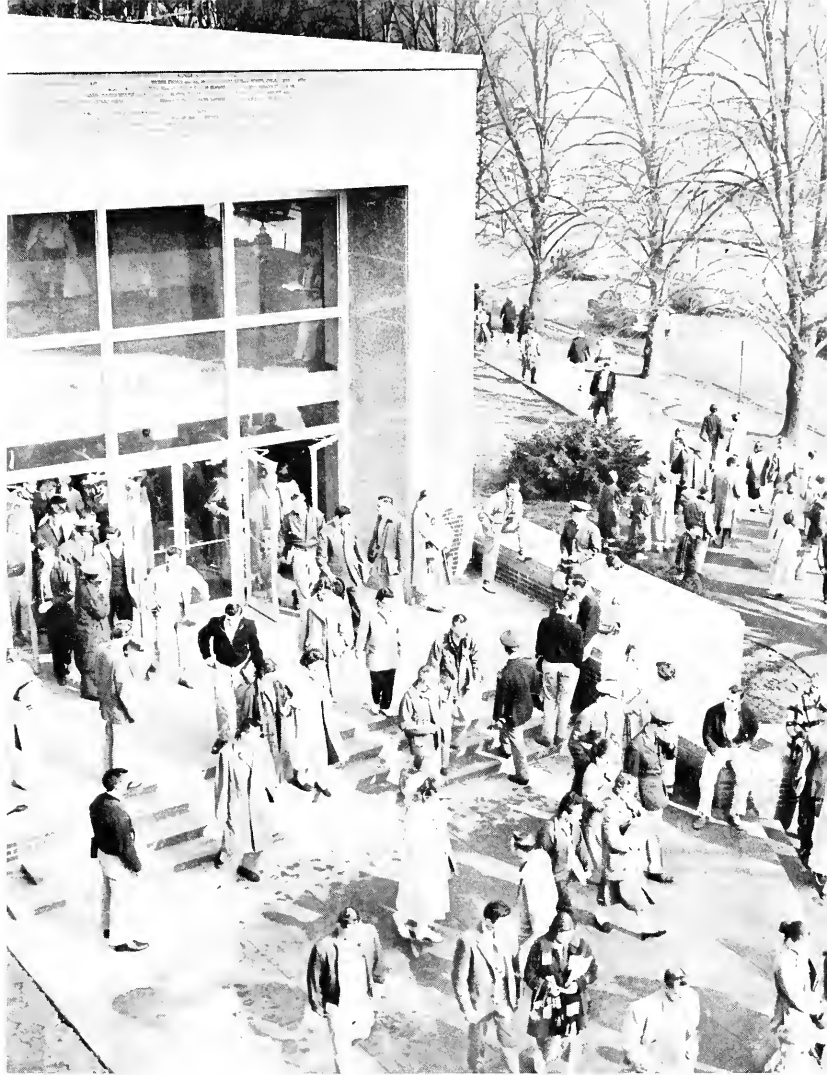
The University participates in the Hampshire Inter-Library Center, a research library established in 1951 and operated jointly by the four Connecticut Valley colleges. Numbering 18,000 volumes, the collection is housed in the Goodell Library on campus.

### **Humanities Center for Liberal Education**

The offices of the executive director of the American Humanities Center for Liberal Education are maintained at South College. This is a national agency fostering strengthened relationships between the liberal arts and sciences and the world of affairs and action.

### **Four College Co-operation**

The University shares with nearby colleges, Smith, Mount Holyoke and Amherst, an exchange of course programs for advanced students. Faculty are also lecturers at neighboring institutions in certain special courses. With the permission of the Provost, the student may enroll in advanced courses not available at the University. Mutually acceptable arrangements among the four colleges have been made concerning costs and transportation.



## *What Is a University?*

**Faculty . . . Students . . . Buildings**



**... in a home**

*Relaxing and Studying*

**... within a home**





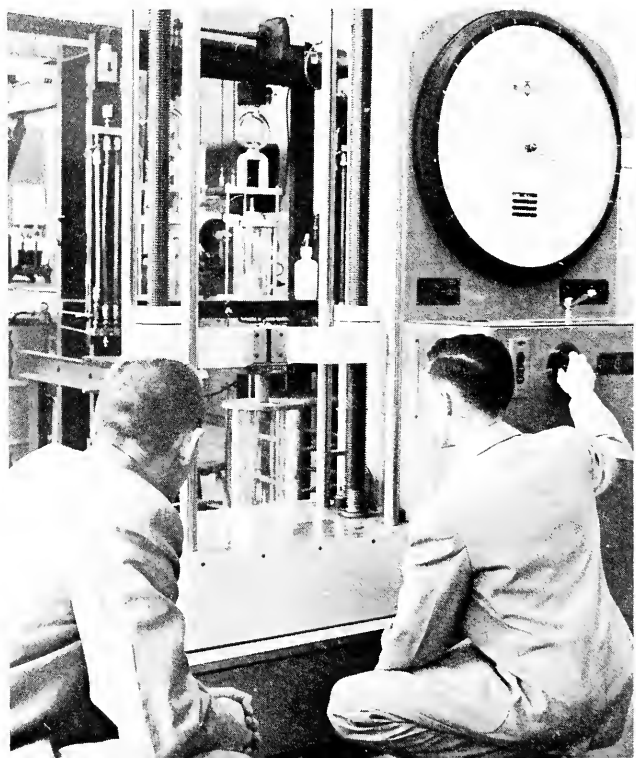
**... for men**



**... in languages**

**... in engineering**

*Laboratory  
Learning*



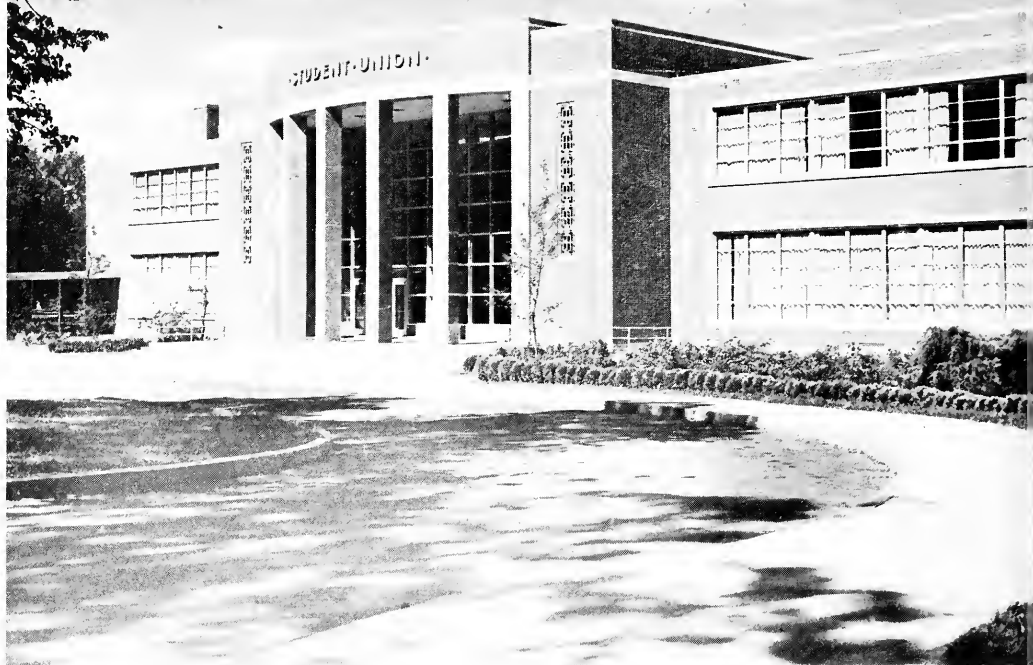




**... the search continues**

**... in the classroom**





## *Student Union*

*Campus Center for  
Recreation and  
Extra Curricular Activities*

**New England Regional Program**

Under auspices of the New England Board of Higher Education, University students may participate in a co-operative program with the six state universities. For certain specialized majors, the student may attend another state university at the in-state tuition rate.

## STUDENT ORGANIZATIONS

One of the values received from the University course is the training one acquires through participation in student activities. Student organizations offer excellent opportunities for development of leadership and broadening of outlook.

### Student Government

The Student Senate operating under the student constitution and composed of elected representatives from the student body is the governing council of undergraduates. Its aim is to promote the general welfare of the University and, in doing so, groups of both students and faculty meet to further their mutual interests. The Student Senate directs student conduct and represents the interests of the student body before the faculty. The Dean of Women and Dean of Men are the respective advisers of the Committee on Women's affairs and Committee on Men's affairs, composed of the women and men of the Senate.

### Academic Honor Societies

*Phi Kappa Phi.* The Massachusetts Chapter of the Honor Society of Phi Kappa Phi was installed on the campus in 1904. Its prime object is to emphasize scholarship and character. Senior students from all departments of the University are eligible for election to membership provided the scholastic and character requirements of the Society are met.

*Sigma Xi.* The Society of the Sigma Xi, Companions in Zealous Research, is the National Honorary Society whose objective is the encouragement of original investigation in science, pure and applied. Since 1938, a chapter of the Society has been active on the campus of the University. The Chapter may elect to associate membership undergraduate students who have shown marked excellence in study of the recognized fields of the sciences and engineering. Election to full membership is accorded those who have clearly demonstrated ability to pursue independent scientific research. The Chapter sponsors a program of public lectures and a number of awards designed to foster the objectives of the Society.

*Omicron Nu.* The Alpha Pi chapter of the Society of Omicron Nu was installed on the campus in 1952. The purpose of the society

## STUDENT ORGANIZATIONS

is to recognize superior scholarship and to promote leadership and research in home economics. Membership is open to juniors and seniors majoring in home economics who meet the requirements of the society.

*Phi Tau Sigma.* Phi Tau Sigma Honorary Society is the international honor society for food science. It was founded at the University of Massachusetts in 1953, and its executive headquarters are permanently located here. Its purpose is to encourage and recognize achievement in food science. Senior students from all departments related to food science are eligible for election to membership if they meet scholastic and character requirements of the University Chapter.

*Sigma Gamma Epsilon.* The Beta Theta chapter of the Sigma Gamma Epsilon Fraternity was installed at the University of Massachusetts in 1951. The purpose of the fraternity is to stimulate scholastic, scientific, and social advancement of its members and the extension of the relations of friendship and assistance between the universities and scientific schools with recognized standings in the United States and Canada, which are devoted to the advancement of the earth sciences. Membership is open to men majoring in geology, mining, metallurgy, ceramics, petroleum engineering, or other branches of earth sciences, who meet the requirements of the fraternity.

*Phi Eta Sigma.* The Society of Phi Eta Sigma was installed on the campus in 1955. The purpose of the society is to recognize outstanding scholastic achievement by freshmen men and to encourage a higher standard of learning among all freshmen. Honorary membership is granted those faculty members who are most effective in encouraging students in the attainment of these goals.

### Student Honor and Service Societies

*Adelphia.* The men's senior honor society, recognizing students who have been leaders in the extra-curricular activities of the campus.

*Mortar Board.* The Isogon Chapter of Mortar Board was installed at the University of Massachusetts in 1955. The purpose of the Society is to promote college loyalty, to advance the spirit of service and fellowship among University women, to maintain a high standard of scholarship, to recognize and encourage leadership, and to stimulate and develop a fine type of college woman. Membership is composed of a total of not less than five or more than 25 girls

## STUDENT ORGANIZATIONS

from the senior class selected on the basis of service, scholarship, and leadership.

*Maroon Key.* Men's sophomore honorary society, composed of 25 students elected at the end of the freshman year.

*Scrolls.* Women's sophomore honorary society, composed of 15 students elected at the end of the freshman year.

*Alpha Phi Omega.* A fraternity which renders various kinds of service to the University. The group is composed of former members of the Boy Scouts of America.

### Fraternities and Sororities

Social fraternities on the campus include Alpha Epsilon Pi, Alpha Gamma Rho, Alpha Sigma Phi, Kappa Sigma, Lambda Chi Alpha, Phi Mu Delta, Phi Sigma Delta, Phi Sigma Kappa, Q.T.V., Sigma Alpha Epsilon, Sigma Phi Epsilon, Tau Epsilon Phi, Tau Kappa Epsilon, Theta Chi. An Inter-Fraternity Council, consisting of representatives of these fraternities, has charge of rushing and all general matters dealing with fraternity life.

Sororities include Chi Omega, Gamma Chi Alpha, Kappa Alpha Theta, Kappa Kappa Gamma, Phi Delta Nu, Pi Beta Phi, Sigma Delta Tau, and Sigma Kappa. The Panhellenic Council, made up of representatives from the sororities, supervises rushing and other sorority matters.

### Extra-Curricular Activities

All extra-curricular activities are supervised by the Committee on Recognized Student Organizations composed of alumni, faculty, and students. Recognition is given at an annual Honors Convocation.

*The Collegian.* Undergraduate newspaper published three times a week.

*Freshman Directory.* Magazine published before the opening of fall term containing the photographs and home addresses of entering freshmen.

*The Quarterly.* A magazine in which the literary and artistic efforts of the students are published.

*Index.* The year book.

*University Handbook.* Published annually as a campus book of reference.

*Ya Hoo.* Campus humor magazine published three times a year.

*University Musical Organizations.* Open to all students of the

## STUDENT ORGANIZATIONS

University. For instrumentalists: Band, dance band, orchestra and ensembles; for vocalists: Chorus, Chorale, Operetta Guild and small combinations. A women's drill team, the Precisionettes, performs at home games and ceremonies. The University Concert Association provides an annual series of major concerts by famous artists.

*Drama.* Drama is represented on the campus by the Roister Doisters, open to all students interested in theater arts; and the University Players, open to those students who have shown outstanding ability, effort, and interest in some phase of dramatics through the Roister Doisters.

In addition, there are approximately 100 student organizations which offer an opportunity to participate in small group meetings.

### Intercollegiate Athletics

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 Secretary of the Alumni Association, and ex officio, the Director of Athletics.

The University believes there are educational advantages in participating 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, skiing.

The University 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, volleyball. Individual activities include tennis, bowling, badminton and golf.

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.

### Professional Clubs

There are numerous professional clubs, established in connection with the various major courses of study. These clubs stimulate the students' professional interest in their chosen subject matter fields and afford opportunity for discussion of technical subjects of mutual interest.

## UNDERGRADUATE CURRICULA

Undergraduate instruction is organized into the College of Arts and Sciences, the College of Agriculture, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing, and Physical Education.

This section of the bulletin deals with the opportunities for study and the curricula available in each of these departments of the University.

### COLLEGE OF ARTS AND SCIENCES

CLARENCE SHUTE, *Acting Dean*

The College of Arts and Sciences offers instruction in the fine arts, the humanities, the social sciences, and the natural sciences both for students enrolled in the College and for those in other undergraduate divisions of the University. The program includes those general education courses essential to enlightened citizenship as well as those desirable for such preliminary specialization as is compatible with the general requirements of undergraduate education.

Upon the successful completion of the requirements established by the Faculty of Arts and Sciences, the student may receive either the degree of Bachelor of Arts or the degree of Bachelor of Science.

### MAJORS

Major work is available in the following departments.

#### **Art**

The department of art is interested in providing two kinds of training: first, to give each student a good general historical and aesthetic knowledge of the arts; second, to give each student an opportunity to develop his creative ability in the several media of the arts. Majors will have specialized sufficiently to allow them to enroll in a professional art school at an advanced level, or to take jobs upon graduation in business or cultural organizations where some facility in the arts is required.



### **Astronomy**

A co-operative program in astronomy utilizing the staff and facilities of the three neighboring institutions is available to undergraduates.

### **Bacteriology**

The courses in bacteriology have been planned to furnish (1) a general and applied training for students majoring in other departments who must have some knowledge of bacteria and (2) specialization for those contemplating a professional career in bacteriology.

### **Botany**

The program in botany is designed to prepare students for teaching or research careers in biological sciences in high schools, universities, industry, and research experiment stations.

### **Chemistry**

The objectives in chemistry are to give the student an understanding of the subject which will enable him to appreciate the relation of chemistry to other sciences and to industry, and to provide training for those who intend to become teachers and workers in the allied sciences, and for those who wish to go on to graduate study and into a professional career in chemistry. Completion of the course in chemistry fits the student for positions in the chemical industries and related fields as well as in the agricultural industry, for employment in state and federal agricultural experiment stations and commercial laboratories, for teaching and for graduate study.

### **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; and (2) to provide students with the elementary training necessary for further study and solution of economic and business problems.

For the majors in economics, there are offered courses which may be combined to serve as preparation toward a number of different careers in business, government, and teaching. Possible fields include: Banking and finance, international trade, labor and personnel relations, market research, public utilities, including transportation, social security, statistics.

## **ARTS AND SCIENCES**

### **English**

The department of English offers courses in English composition, language, and literature. Students majoring in English must conform to the requirements for freshman and sophomore years, and in choosing sophomore electives should include one semester of English history, and two semesters of foreign language. At least two of the total of four semesters of foreign language required of English majors must be above the elementary level.

The courses in English are intended to enable students to express themselves effectively and to appreciate humanistic values and the ideals of English-speaking people throughout their history. The courses also offer an appropriate, and in some instances an adequate, classroom training for work in such fields as teaching, authorship and editing.

### **Geology**

The courses in geology are offered with three objectives in view: (1) to contribute to the cultural education of all students by providing a better understanding and a greater appreciation of the world we live in, and the evolution of life on it; (2) to give the basic preparation for a career in any of the various branches of geology; and (3) to afford the essential background in earth science required by students specializing in other fields such as engineering, conservation, agronomy, forestry, etc.

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.

### **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.

Students taking work in government may prepare themselves for (1) graduate study in political science and government, (2) careers in public administration at federal, state, and local levels, (3) research concerning governmental problems, (4) the study of law, (5) entrance into foreign service, (6) teaching government and social science courses in secondary schools.

## 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.

A major in history has value to the general student as a humanistic discipline. It has application as preparation for careers in fields of teaching, law, government, journalism, ministry, library and business.

## Journalism

The journalism program is concerned with (1) the study 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.

For such students the journalism courses are intended to provide both increased communication skill and relevant background. The courses may have special value also for students who plan to go into government service, law, education, and similar fields in which knowledge of the process and effects of communication is particularly useful.

The courses emphasize (1) the professional responsibilities of the mass media in a free society, (2) communications research, and (3) study of the reporting of those issues in public affairs which may be evaluated as contemporary history.

## Mathematics

The department offers courses designed to furnish a cultural background as well as a foundation for both undergraduate and graduate work in such fields of science as physics and chemistry, in engineering and in other technical subjects.

The courses recommended for majors in the department are designed to prepare students for high school teaching, graduate study in mathematics, actuarial work, statistical work, or work as engineering aides.

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### **Music**

Music courses furnish an understanding of the history and literature of music, a knowledge of music theory, some fundamental principles of interpretation, practical teaching methods, and various levels of applied music training.

All majors are expected to take Music 1 and 2 during the freshman year, and in the sophomore year, Music 53 and 54. A course in applied music is required each semester of all majors.

Applied music courses are available to all students; all music majors are required to study the technique and literature of the voice or piano or other instruments. Arrangements for instruction are completed in the Music Department Office. Fees for courses in applied music vary according to the proficiency of the student, the type of teaching involved, and the amount of teaching time required. Bills are payable to the instructor at the first lesson of each semester. No deductions are allowed if lessons are discontinued before the end of the semester. All applied music credits earned in excess of 3 will be recorded but will not be included in the 120 credits required for graduation.

### **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 College of Arts and Sciences. In the latter case, they will be assigned to advisers in the same manner as the other pre-professional students.

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Medical schools do not look with favor on over-specialization in any field. They stress the importance of a broad general education. Since the University requires that every student who graduates must have selected at least 15 credits of junior-senior courses in some one department, the pre-professional student should include courses beyond the introductory level in all fields, especially in the humanities and social sciences. The student decides on his electives only with the advice and consent of his adviser.

### Psychology

The courses in the psychology department are designed (1) to impart an understanding of behavior and the application of this knowledge to problems of human adjustment; and (2) to give preparation for professional work in psychology and related fields.

Careers open to psychology majors include: Teaching and research, guidance and counseling, psychometrics, child welfare, clinical psychology, school psychology, social work, opinion polling, personnel and industrial work and engineering psychology. Graduate training is required for certain of these careers.

### Public Health

The curriculum in public health is designed to prepare a student for a health career. Career opportunities are open in: (1) administration of health services; (2) in basic sciences related to health; (3) in environmental health services; (4) in food and drug protective services; (5) in health education; and (6) in health information and communications.

### Romance Languages

Two majors are offered: French and Spanish. 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.

### Sociology and Anthropology

The courses in sociology and anthropology 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.

Students interested in teaching at the elementary or high school level should take a minor in the School of Education and at least 6

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credits in American history with as many credits in American government as can be arranged.

Of the many opportunities in the field of social work, some are available to college graduates, while others require graduate training in a school of social work.

Aside from opportunities in the business world, many federal agencies and private research organizations seek people who are trained in the research techniques of sociology.

### Social Work

The American Association of Schools of Social Work indicates that the pre-professional subjects most closely related to professional work in this field are economics, political science, psychology, and sociology. The Association recommends that prospective students of social work or social administration take not fewer than 12 semester hours in one of these subjects while taking less in others. It also recognizes the value of courses in biology, history, English, as well as other subjects contributing to a broad cultural background for the student.

### Speech

An undergraduate major in speech may be earned by completing thirty semester hours of course work in the department although nine of these may be earned in English and philosophy. Psychology 26 should be elected as a basic requirement. The student must select an area of concentration in (1) Rhetoric and Public Address, (2) Interpretation and Theatre, (3) Radio and Television, (4) Speech Education, (5) Speech and Hearing Therapy. Students concentrating in Speech and Hearing Therapy may fulfill all the certification requirements of the American Speech and Hearing Association and the Massachusetts State Department of Education. Students interested in preparation as public school therapists should plan to minor in the School of Education. For those interested in work in a rehabilitation or hospital setting, a minor in psychology should be planned.

### 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 future teachers and laboratory technicians in the biological sciences.

## COLLEGE OF AGRICULTURE

FRED PAINTER JEFFREY, *Acting Dean*

The College of Agriculture offers a broad education with specific training in some phase of agriculture or horticulture. Upon the completion of the requirements for graduation, 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 in agriculture and horticulture.

A broad choice of electives within the required courses of each curriculum gives the student the opportunity to prepare for (1) actual agricultural production; (2) research, teaching, or extension work; or (3) industrial work.

Each department of the College has specific requirements for graduation which are included in the descriptive matter 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.

The College has the following departments: Agricultural Economics and Farm Management, Agricultural Engineering, Agronomy, Dairy and Animal Science, Entomology and Plant Pathology, Food Technology, Forestry and Wildlife Management, Horticulture, Landscape Architecture, Poultry Husbandry, and Veterinary Science. Students may major in any of these departments except Veterinary Science; pre-veterinary students are counseled in the College of Arts and Sciences.

### MAJORS

At the end of the sophomore year each student selects one of the following curricula as his major to complete his collegiate training.

#### Agricultural Economics

This department is concerned with the application of economic principles within the agricultural industry. Students trained in these principles can apply them to a producing farm, a food process-

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ing firm, a retail food enterprise or personal decisions. Fields of study are farm management, agricultural business management, and food marketing and distribution. Associated with these are training in farm policy, credit, cooperatives, land economics, and statistics.

A student majoring in this department may prepare himself for professional positions in teaching, research, extension, or other public service. He may prepare also for business positions in production, marketing, credit and related fields. A student specializing in farm management is trained to manage and operate a farm. Depending on their career objectives, departmental majors may take supporting work in production departments.

### **Agricultural Engineering**

Agricultural engineering is concerned with the application of scientific engineering principles to agricultural production and related agricultural industries. This professional field includes engineering activities related to the design, development and use of mechanical and electrical equipment; farm 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.

The program is designed to provide sound training for the agricultural engineering profession. The student majoring in this field will take his freshman and sophomore work at the University and then, under a co-operative agreement, complete his Bachelor of Science program at the University of Maine.

### **Agronomy**

The courses are designed to give instruction concerning the basic knowledge of the soil and its management, fertilizers and their uses, as related to the principal products of the field. Crop management practices and the science of crop improvement are stressed for those who are interested in agronomy as a specialty.

There is sufficient flexibility within the curriculum to allow the student to specialize in general agronomy, plant science, soil conservation and turf. Those students who have a desire to receive training which will qualify them for investigational work in these fields may obtain it by selecting appropriate supporting science or vocational subjects as electives. This training equips them to serve as specialists in one of these selected fields for industrial corporations and may serve also as training for extension or teaching work.



**Animal Science**

The animal science curriculum is designed to provide the student with fundamental training in the physiology, breeding, nutrition, selection and management of farm animals. The curriculum is made flexible by permitting specialization in optional fields which prepare the student for positions in dairy cattle production and livestock production. An option is also available for those desirous of adequately preparing themselves for graduate work in animal science, including such specialized areas as animal nutrition, physiology or breeding.

**Dairy Technology**

Major students in dairy technology receive training in the testing, handling, and processing of milk, ice cream, butter, cheese, and other milk products. Practical application is made of chemistry, bacteriology, economics, and engineering in the many phases of dairy work.

Dairy technology graduates may secure responsible positions with commercial dairy manufacturing firms, or with equipment and supply firms. Opportunities are offered also for positions as teachers in high schools and colleges, for service in the fields of extension and research, and for sanitation and public health work with city, state or federal agencies.

**Entomology**

Courses in entomology acquaint students with all phases of insects and insect control, as well as beekeeping. 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 commercial beekeeping.

**Floriculture**

The courses in floriculture provide instruction in production, marketing and uses of cut flowers, flowering and foliage plants grown outdoors and under glass. Opportunities available to a graduate may include: teaching in secondary schools, director of educational garden center, horticulturist for television and radio programs, service personnel for industrial concerns manufacturing equipment and supplies used in the production and distribution of floricultural crops, commercial production; graduate study leading to professional careers in college teaching, research, and extension with state, federal and private agencies.

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### **Food Distribution**

The curriculum in food distribution is offered by the agricultural economics department. The curriculum provides training in the technological and business management aspects of processing and distributing food.

The student receives basic preparation for a career in the rapidly expanding food industry. Graduates in food distribution are sought by supermarket organizations, wholesale food distributors, food brokers, food processors and other food marketing agencies. These food distribution firms offer careers in management, buying, merchandising, packaging and many other specialized and managerial positions. Careers in university teaching and research and in government agencies are also available.

### **Food Management**

The curriculum in food management is offered by the food technology department. The program is designed to give the student a general well-rounded background of arts and sciences, coupled with training in subjects useful to the hotel and restaurant industries. The nature of the food service industry requires persons with broad, general backgrounds of business training coupled with a scientific knowledge of foods.

### **Food Technology**

The department of food technology offers two curricula: Food Management and Food Technology.

The curriculum in food technology provides scientific and applied training in the principles concerned with the processing, preservation, and packaging of foods and food products. The student's background in chemistry, physics, and bacteriology is applied to food technology problems and food analysis. Major fields open to graduates include: (1) technical and production work in the food industries; (2) control and analytical work related to food products; (3) government food inspection and grading; (4) technological work and research in government, industry, and education.

### **Forestry**

The technical curriculum in forestry is concentrated in the field of forest production and management, and leads to the degree of Bachelor of Science. It has professional status, being accredited by the Society of American Foresters. Graduates are prepared for em-

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ployment with Federal and State agencies and in private industry. The curriculum emphasizes the multiple-use concept of forest land management, and stresses the scientific and economic foundations of forestry rather than methods.

### **Landscape Architecture**

Students following this curriculum, which requires 125 credits for graduation, are prepared to take up work in landscape architecture, which leads through field experience or post-graduate study to permanent establishment in the profession.

### **Landscape Operations**

This curriculum, offered by the department of landscape architecture, is suggested for those preferring to follow the horticultural phase of landscape including (1) nursery practice; (2) landscape planning and construction; and (3) maintenance of landscaped areas, such as parks and semi-public institution grounds.

### **Olericulture**

The courses in olericulture provide a basic training in the scientific principles and the applied practices as these relate to the production and marketing of vegetable crops.

The curriculum in olericulture prepares students for job opportunities in teaching, extension and research in the professional and industrial fields; as technicians, management and in sales and service work in industries such as machinery, fertilizer, chemicals, in produce inspection and the various phases of retail and wholesale marketing and in the operation and management of commercial production enterprises.

### **Plant Pathology**

Plant pathology is concerned with the nature and control of plant diseases caused by fungi, viruses, bacteria, nematodes, certain higher plants and unfavorable environmental conditions. Plant pathologists fill positions in public service and in industry, such as teaching at all levels; research in state, federal, university, and industrial laboratories and experiment stations; and extension service through federal, state, and county organizations. They are employed in quarantine and regulatory work, in various roles in plant disease control, and in sales and public relations work in agricultural chemical industries.

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### **Pomology**

The pomology courses provide a comprehensive training in the scientific and commercial principles concerned in the growing and marketing of apples, pears, peaches, plums, cherries, and small fruits. Major fields open to graduates include: (1) practical work in connection with the operation of fruit farms; (2) teaching in college, high school, or secondary schools of agriculture; (3) extension work in county, state, or nation; (4) research work with state, federal or private concerns; and (5) commercial work in connection with the manufacture and sale of such supplies as machinery, packages, and spraying and dusting materials.

### **Poultry Husbandry**

Two general areas of study are available to the student majoring in this department depending on interests and abilities.

(1) Poultry Production and Management—This plan of study will prepare students for farm operations either as owners or managers; as servicemen, specialists and managers in industrial fields; and for federal and state extension work and regulatory programs allied to the poultry industry. The program is supported by electives in business, agricultural economics and communicative skills.

(2) Poultry Science—This program is primarily for students interested in and capable of graduate work leading to careers in poultry science teaching and research and as agricultural scientists with breeding organizations, feed manufacturers and pharmaceutical corporations. Students interested in poultry science supplement the basic curriculum with basic sciences chosen to support further study in poultry genetics, physiology, nutrition and products technology.

### **Veterinary Science**

Though major work in veterinary science is not available, the department does offer supporting courses to assist students who expect to enter the various fields of agriculture, wildlife management, public health, teaching and laboratory work in the biological sciences or veterinary medicine.

### **Wildlife Management**

The courses in conservation and wildlife management offered by the department of forestry and wildlife management are designed for those who desire a general understanding of the renewable natural resources as well as those who expect to make a living in the professional field of wildlife management.

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Wildlife management is concerned with the production and control of animal populations on many types of land including farms, forests, and on waste lands and water areas. Fields of specialization include fisheries management, game, furbearer management and control of injurious animals, and related fields such as soil conservation, conservation education, and industrial biology.

Graduates in this field are eligible to take both state and federal civil service examinations, and most of the permanent job opportunities are in public service either with the state or federal government. A limited number of positions are open in private enterprises. Training in the wildlife field is an excellent background for teaching in the public schools and for employment in the conservation service.

## SCHOOL OF BUSINESS ADMINISTRATION

H. B. KIRSHEM, *Dean*

The School of Business Administration prepares students to take advantage of important economic opportunities and eventually to assume positions of responsibility in business. The School's educational program is directed toward the professional aspects of business, encouraging high standards of ethical conduct, broad social responsibilities and the development of competence in particular courses of study of the student's own 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 first two years are largely prescribed.

The junior and senior years emphasize a greater degree of specialization and provide for this in the programs indicated below. But even in these last two years all students need to view business as a whole insofar as a "core" of courses can do this.

Each course of study leads to the degree of Bachelor of Business Administration.

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

## MAJORS

Courses and major programs are listed under four departments in the School of Business Administration: Accounting, General Business and Finance, Management, and Marketing.

### **Accounting**

Accounting deals with the problems of measuring, recording, reporting and interpreting business transactions. This program is for the student who wishes to prepare for employment as auditor, controller, cost analyst, industrial accountant, public accountant, or teacher of accounting.

## BUSINESS ADMINISTRATION

### General Business and Finance

The department has three major programs: *Finance*, *Business Administration and Economics*, and *General Business*. 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 that student who does not wish to specialize in any particular field.

### Management

Industry and business offer to qualified students an opportunity to find careers in *General Management*, *Production Management*, and in *Personnel Management and Industrial Relations*. These three major programs are offered in each of these fields to give the student both a specialized and a comprehensive understanding of industrial enterprises.

### Marketing and Merchandising

Students in marketing prepare for a variety of positions in wholesale and retail enterprises and the sales activities of manufacturers. The program includes specialized study of basic types of market operations.

## SCHOOL OF EDUCATION

A. W. PURVIS, *Dean*

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 training 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 (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 the freshman year.



**Secondary School Teaching**

All candidates for secondary school teaching will major in the subject field to be taught and minor in education.

**Special Field Programs for Prospective Teachers**

In Vocational Agriculture (C. F. Oliver, adviser). This program is based on a co-operative agreement between the University and the Vocational Division of the State Department of Education which provides supervisors and consultants in conducting the program.

In Home Economics (Miss Strattner, adviser). Students major in home economics and minor in education.

In Teacher Coaching (S. W. Kauffman, adviser). Students major in physical education and minor in education.

In Music (D. Alviani, adviser). Students major in music and minor in education.

## SCHOOL OF ENGINEERING

G. A. MARSTON, *Dean*

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. An optional curriculum in industrial engineering is offered in the mechanical engineering department.

All curricula have been 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 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.

## MAJORS

Majors in Engineering will select one of the following curricula.

### **Chemical Engineering**

Chemical engineering is that branch of engineering concerned with the development of manufacturing processes in which chemical or certain physical changes of materials are involved. These processes may usually be resolved into a co-ordinated series of unit

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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 series of these unit operations and processes 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 industries manufacturing chemicals but in many others utilizing materials which can undergo chemical and physical changes. Examples are: 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.

### 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 of civil engineering 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 studies outside of the department give the student an understanding of the broader aspects of engineering and other fields.

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

### **Industrial Engineering Option**

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.

## SCHOOL OF HOME ECONOMICS

The four-year integrated program in home economics prepares young women for challenging professional careers as dietitians in hospitals, clinics, hotels, in other institutions and as community nutritionists. Various opportunities are open in extension service, in family welfare organizations, in business and industry, where manufacturers and public utilities require the services of qualified home economists. Fashion, textiles, merchandising and retailing, journalism, advertising and television frequently turn to the home economist for their personnel. Home economics education prepares teachers for pre-school, secondary and adult teaching programs.

In addition to preparation for a career in one of these professions, the graduate home economist has developed an appreciation of the knowledge, understandings, attitudes and skills essential to the dual role of modern women in homemaking and community life.

### **Child Growth and Development**

Students interested in child development, nursery school work and social service work may choose this curriculum. The University has arranged for two affiliations for qualified students interested in taking one semester of specialized work elsewhere: with Merrill-Palmer School in Detroit, which specializes in education for home and family life, and with the Eliot Pearson School in Boston which gives professional training for teaching in nursery schools and kindergartens.

### **Foods and Nutrition, and Institutional Administration**

This curriculum prepares for such professions as therapeutic and administrative dietitian, or nutritionist, and meets the requirements of internships approved by the American Dietetic Association. This basic curriculum is also advised for those interested in home service, food testing, commercial food demonstrating; commercial, industrial and institutional food service.

### **Home Economics Education and Extension**

Preparation for teaching demands the same basic courses whether a student plans to teach adults or 4-H Club groups in Extension, or young people at the high school or junior high school level.

## **HOME ECONOMICS**

Teachers should be ready to teach some subject other than home economics if demanded; extension workers need special work in rural sociology and adult education. Courses in speech and writing are important. Camp teaching or apprentice training is recommended between junior and senior year.

### **Merchandising**

This curriculum provides an opportunity for girls interested in preparing for the merchandising field. The junior and senior curriculum includes courses in home economics and in business administration and should be planned with the faculty adviser by the end of the freshman year if possible. Students choosing this program should plan on at least a year of in-service training after college. If the interest is primarily in business, see the Merchandising major under the School of Business Administration.

### **Pre-Research in Foods and Nutrition**

This curriculum is planned for the students who wish to prepare for graduate work in nutrition or biochemical research. The course should be planned with the advice of the Dean of the School.

## SCHOOL OF NURSING

MARY A. MAHER, *Dean*

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. A foundation is laid for advanced study, through which the nurse may prepare for positions in teaching, supervision, administration, consultation and research.

During the first two years at the University, 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, with instruction and correlated clinical practice given in selected cooperating agencies by the nursing faculty of the University and allied professional staffs of the cooperating agencies. These agencies include: the Springfield Hospital; the Weson Maternity Hospital, Springfield; the Visiting Nurse Association of Springfield; the Springfield Health Department; the McLean Hospital, Waverly; and other community health, educational, and welfare resources.

The Bachelor of Science degree, awarded upon successful completion of this program, qualifies the graduate for 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 University's School of Nursing is fully accredited by the National League for Nursing, Inc.

## SCHOOL OF PHYSICAL EDUCATION

W. P. McGUIRK, *Dean*

The School of Physical Education includes the Departments of Physical Education for Men, Physical Education for Women, Recreation Leadership, and Athletics. It offers a major in Physical Education and in Recreation Leadership.

### 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 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.

To fulfill requirements, all students must participate in three team sports, four individual activities and aquatics.

#### **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



## **PHYSICAL EDUCATION**

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. Especial 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. There is opportunity for individual selection in order to provide a minor.

## **RECREATION LEADERSHIP**

### **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.

## **DEPARTMENT OF ATHLETICS**

A comprehensive program of intercollegiate and intramural athletics is conducted by the department's coaching staff.

## DIVISION OF MILITARY AND AIR SCIENCE

PROVOST SHANNON McCUNE, *Director*

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, but qualified students in other departments may take up to 16 semester hours of credit within the Division. All physically qualified male students, except veterans, who intend to complete the necessary requirements leading to a degree in any four-year course at the University are required to take the basic course (Army or Air) in the freshman and sophomore years. Conscientious objectors may apply to the President of the University for authorization to be excused from this requirement.

### DEPARTMENT OF MILITARY SCIENCE (ARMOR)

JAMES R. WEAVER, *Colonel, Infantry, Head*

The Army Reserve Officers Training Corps is the means by which young men may assure themselves that their military service is performed in commissioned status.

The first two years provide 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 volunteers are permitted to contract to continue on to a reserve commission. The Army provides these men a subsistence allowance and additional emoluments. There is a six-week summer training period between junior and senior years.

Participation in ROTC has notable effect on character development. It also discloses to the Army existing officer material and potential leaders.

### DEPARTMENT OF AIR SCIENCE

JOHN C. MARCHANT, *Colonel, USAF, Head*

The mission of the department program is to develop in selected college students, through a permanent program of instruction, those qualities of leadership and other attributes essential to their pro-

## MILITARY

gressive advancement to positions of increasing responsibility as commissioned officers in the United States Air Force. It is not expected that all so commissioned will select the USAF as a career; nevertheless, the program does offer an excellent means to prepare for such a career.

The first two years of instruction, the basic course, give a foundation for leadership and for air and space age citizenship. The program of the last two years, advanced AFROTC and four weeks of summer training at the end of the junior year, is designed primarily to provide officer training for those selected and qualified for flight training and for technical or administrative assignments.

## RELIGION

CHAPLAINS POWER, RUCHAMES, AND SEELY, *Advisers*

Although there is no department of religion at the University of Massachusetts, students interested in pursuing religion as an academic discipline have certain opportunities, both in curricular and co-curricular ways.

In the formal curriculum, courses are offered by several departments in the College of Arts and Sciences. Credit courses in history, such as those covering the ages of medieval civilization and of the Reformation, for example, afford systematic study into the religious institutions and movements of those periods. Similarly, those offered by the philosophy department in the Philosophy of Religion and in Oriental Philosophies provide a critical and constructive study of basic issues, in both the contemporary western world and Asia. In the English department, a careful examination of the Bible is available in the course, *The Bible as Literature*. Also, certain courses in other departments deal with matters of religion.

In addition to curricular work, students may learn from co-curricular programs of an academic nature offered by the Chaplains and the campus religious organizations. Each year classes (non-credit) are taught by the Chaplains and invited lecturers on topics such as Basic Beliefs and Practices of Judaism, Catholic Faith and Practices, Essentials of Protestant Christianity. Classes in Hebrew and Yiddish, study groups on various problems in campus living, and workshops on personal relations are also open to students.

The B'nai B'rith Hillel Foundation, the Christian Association, and the Newman Club frequently bring to the campus lecturers and scholars of national and international repute to speak at open meetings. Distinguished scientists, journalists, and government officials, as well as theologians and religious leaders, have come as guests of the religious organizations, and some provide leadership for large-scale events such as retreats, the Religious Embassy, and holy day observances. Lectures on religion are occasionally offered in a series of three or more under the leadership of well-known scholars and teachers. The educational and cultural programs of the campus religious organizations are open to all who are interested.



