

**UNIVERSITY OF NEW  
HAMPSHIRE;  
UNDERGRADUATE  
CATALOG 1987 - 1988**

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**VARIOUS**

**UNIVERSITY OF NEW  
HAMPSHIRE;  
UNDERGRADUATE  
CATALOG 1987 - 1988**



U N I V E R S I T Y   O F  
N E W   H A M P S H I R E



U N D E R G R A D U A T E   C A T A L O G  
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## *Summer Session 1987*

May 25 to August 14

### *Semester I*

**August 29, Saturday**

Residence halls open for freshmen

**August 30, Sunday**

Residence halls open for upperclass students  
Registration for new students

**August 31, Monday**

Registration for continuing students

**September 1, Tuesday**

Classes begin (classes follow Monday schedule)

**September 7, Monday**

Labor Day holiday—no classes

**September 8, Tuesday**

Last day to withdraw and qualify for 3/4 tuition refund

**September 18, Friday**

Last day to add courses without dean's approval and without \$25 late add fee

Last day to drop courses or change to audit without \$25 late drop fee

Last day to choose pass/fail option

**October 1, Thursday**

Last day to withdraw and qualify for 1/2 tuition refund

**October 2, Friday**

Last day to drop or change to audit without dean's approval (\$25 per course late fee continues to apply)

Last day to carry more than 20 credits without a surcharge

**October 16, Friday**

Midsemester

Last day to drop courses or withdraw from the University without academic liability

**November 3, Tuesday**

Election Day—no exams can be scheduled

**November 11, Wednesday**

Veterans Day holiday—no classes

**November 26–27, Thursday–Friday**

Thanksgiving Holiday

**November 30, Monday**

Classes resume

**December 4, Friday**

Last day an announced oral or written exam may be given before final exam period

**December 11, Friday**

Last day of classes

**December 12, Saturday**

Commencement

**December 14, Monday**

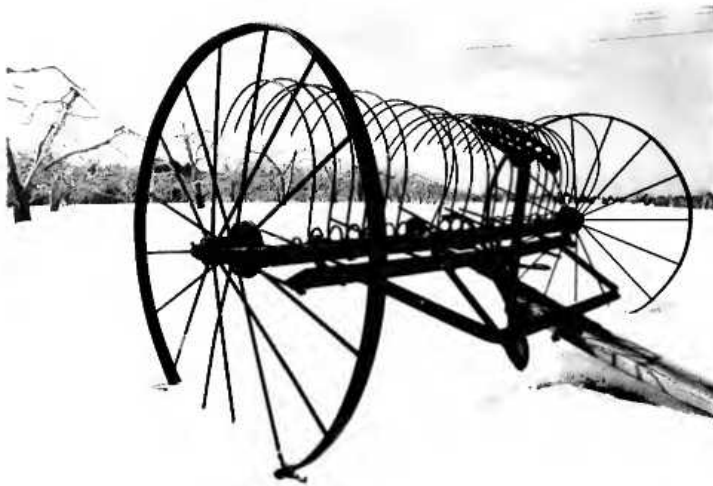
Reading Day—no classes

**December 15, Tuesday**

Final exams begin

**December 19, Saturday**

Final exams end



## *Semester II*

**January 17, Sunday**  
Residence halls open

**January 18–19, Monday–Tuesday**  
Registration days

**January 20, Wednesday**  
Classes begin

**January 26, Tuesday**  
Last day to withdraw and qualify for  $\frac{1}{2}$  tuition refund

**February 5, Friday**  
Last day to add courses without dean's approval and without \$25 late add fee  
Last day to drop courses or change to audit without \$25 late drop fee  
Last day to choose pass/fail option

**February 18, Thursday**  
Last day to withdraw and qualify for  $\frac{1}{2}$  tuition refund

**February 19, Friday**  
Last day to drop or change to audit without dean's approval (\$25 per course late fee continues to apply)  
Last day to carry more than 20 credits without a surcharge

**March 11, Friday**  
Midsemester  
Last day to drop courses or withdraw from the University without academic liability

**March 14–18, Monday–Friday**  
Spring Break

**March 21, Monday**  
Classes resume

**May 3, Tuesday**  
Last day an announced oral or written exam may be given before final exam period

**May 10, Tuesday**  
Last day of classes

**May 11–12, Wednesday–Thursday**  
Reading Days

**May 13, Friday**  
Final exams begin

**May 19, Thursday**  
Final exams end

**May 20, Friday**  
Senior Day

**May 21, Saturday**  
Commencement

## *Summer Session 1988*

May 23–August 15



# Contents

The first half of this bulletin explains the University's General Education Requirements, honors program, and requirements for a degree; describes programs offered in the University's colleges and schools; and gives information about majors and the requirements for them. Special University programs that cut across traditional college lines are explained at the end of this first section. This first half also provides general information about admission, student affairs, and costs.

The second half of the bulletin describes individual courses. (Note explanation of arrangement on page 97.) The section concludes with a listing of faculty, as well as other items noted in the contents.

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For information about undergraduate admission to the University, students should contact: Stanwood Fish, Dean of Admissions, 603-862-1360.

For information about courses and academic records, students and former students should contact: Stephanie M. Thomas, Registrar.



# General Information

## The University

### History

The University of New Hampshire, founded in 1866 as the New Hampshire College of Agriculture and the Mechanic Arts, was among the early state institutions of higher education whose formation was made possible by federal government land grants to establish colleges to serve the sons and daughters of farming and laboring families.

First situated in Hanover as part of Dartmouth College, New Hampshire College moved to its Durham campus in 1893 after Benjamin Thompson, a prosperous farmer, bequeathed land and money to further the development of the College.

The College thrived in Durham, and in 1923 the state legislature granted it a new charter as the University of New Hampshire, composed of the Colleges of Agriculture, Liberal Arts, and Technology. The Graduate School was formally added in 1928. The two-year program in agriculture, which had been offered since 1895, was formally recognized in 1939 and is now the Thompson School of Applied Science. The Whittemore School of Business and Economics was established in 1962.

In 1963, the University System of New Hampshire was created when the teachers' colleges at Plymouth and Keene were brought under the same Board of Trustees as the University. In 1969, the state legislature recognized the extended functions of the College of Agriculture, renaming it the College of Life Sciences and Agriculture, and the School of Health Studies was established as part of the University's programs. Beginning in 1971, the Division of Continuing Education was authorized to offer associate in arts degree programs as an additional approach to higher education for New Hampshire residents. In 1975 the College of Technology was renamed the College of Engineering and Physical Sciences.

In 1967, the University began providing a wide range of undergraduate and graduate studies for students in central New Hampshire through its Merrimack Valley Branch in Manchester. In 1977, the legislature designated the branch as Merrimack Valley College, the fourth campus of the University System. MVC was reincorporated into the University in 1985 as a full-standing urban, commuter college and renamed the University of New Hampshire at Manchester. Its principal purpose is to extend the University's programs and resources to residents of the most densely populated region of the state.

In the 1986-87 academic year, the University had 10,503 degree candidates enrolled, including 496 in the associate in applied science program of the Thompson School and 118 in the associate in arts program in the Division of Continuing Education. In the Division of Continuing Education, 1,732 special students also were enrolled.

Academic and cultural resources of each campus are amplified through System-shared programs and facilities. Cooperative ventures among the 12 member institutions of the New Hampshire College and University Council combine public and private higher education resources.

### Campus

The home of the University is Durham, near the seacoast of New Hampshire—one of the oldest towns in northern New England. The town is semi-rural and still retains traces of its colonial past.

The campus, 200 acres in size, is surrounded by more than 3,000 acres of fields, farms, and woodlands owned by the University. A stream flowing through a large wooded area in the middle of the campus enhances the natural open space among the buildings—74 for teaching, research, and service, and 36 residence halls for men and women.

*University Library* houses 896,267 volumes, 6,310 periodicals, 7,622 tapes and records, 2,073 cassettes, and a substantial microfilm collection. Specialized subject collections in chemistry, engineering and mathematics, biological sciences, and physics are housed in four branches administered by a physical sciences librarian and a biological sciences librarian.

*Athletics-Physical Education* facilities include indoor and outdoor swimming pools; tracks and courts; gymnasiums; weight training, wrestling, and gymnastics rooms; a dance studio; a number of playing fields; and an indoor ice rink.

*Memorial Union Building* contains student activities offices, auditoriums and meeting rooms, food services, games and craft areas, and lounges.

*Paul Creative Arts Center*, home of the departments of the arts, music, and theater and communication, contains two theaters and two art galleries.

*Thompson Hall* is the main administration building.

*College Woods* includes 5 miles of well-kept paths through 260 acres of woods.

*The New England Center*, a cooperative effort by the six state universities of New England to offer outstanding continuing education programs, provides modern facilities for adult education conferences and seminars in its residence-dining-learning center.

*John S. Elliott Alumni Center*, completed in 1977, houses the alumni and development offices and serves as a focal point for alumni activities and campus meetings.

*The University's Computing Facilities* operate virtually 365 days a year, 24 hours a day. They include large DEC 8600s, VAXs, and PRIMEs, plus numerous microcomputers.

### Teaching, Service, and Research

The University of New Hampshire is committed to offering excellent educational programs and opportunities for its students. The University's approximately 570 full-time teaching faculty provide a ratio of one full-time faculty member to about 17 full-time students. Eighty-five percent of the full-time faculty hold doctoral or terminal degrees, and many have earned national and international reputations in their professional fields.

A faculty member's first responsibility is teaching students. In the tradition of the nation's land-grant colleges, the University also encourages its faculty

## General Information

to contribute to the growth of human knowledge through scholarly research and service to the community beyond the campus.

### Accreditation

The University of New Hampshire is accredited by the New England Association of Schools and Colleges, Inc., which accredits schools and colleges in the six New England states. Accreditation by the association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators. Specialized programs of study are also accredited by various professional organizations.

All degree programs at the University of New Hampshire are approved for Veterans Educational Benefits. Individuals are encouraged to contact the Veterans Coordinator in Thompson Hall about specific questions.

The University of New Hampshire supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

## Admissions

### Interviews and Campus Visits

Candidates are encouraged to contact the Office of Admissions to arrange an interview with a student admissions representative. These representatives are qualified to give information about the academic organization of the University and the criteria used by the Admissions Committee in reviewing candidates, and they are best able to discuss student activities, living arrangements, and other aspects of UNH life. A professional staff member oversees each day's interview activity and is available to assist candidates with special concerns or questions. The University welcomes visitors to the campus and conducts scheduled tours. Also, frequent Saturday morning and weekday Group Information Sessions led by an Office of Admissions staff member and student representatives are followed by guided tours of the campus. Please call the Office of Admissions (603-862-1360) for information about dates and times.

### Admission Criteria

Admission to a bachelor's degree program is based upon successful completion of a four-year secondary school program of college preparatory coursework. Primary consideration is given to academic achievement and aptitude, as demonstrated by the quality of candidates' secondary school course selections, rank in class, recommendations, and the results of a College Entrance Examination Board Scholastic Aptitude Test. Consideration is also given to character, leadership, initiative, and special aptitudes and talents.

The choice of secondary school program and courses may limit or enhance opportunities and achievements in college. Candidates are strongly encouraged to extend their knowledge and learning

skills through work in the basic academic disciplines. Most successful candidates present at least four years of English and mathematics, three years of laboratory science, and two years of social science. Successful candidates have generally completed three years of study in a single foreign language or have completed more than one year of study in each of two different languages.

Candidates are expected to pursue in greater depth those fields in which they have special interests. For example, students who plan to specialize in engineering, science, mathematics, or forestry must present four years of mathematics including trigonometry, as well as laboratory coursework in chemistry and/or physics. For students planning to major in health-related disciplines, secondary school laboratory courses in biology and chemistry are strongly recommended.

Applicants who have identified academic fields of interest are asked to indicate their "prospective" majors in order that the University may evaluate their credentials in terms of their academic objectives and avoid excessive enrollments in professional programs with fixed capacities. Candidates may also apply for general admission as "Undeclared" applicants for the College of Liberal Arts, the College of Life Sciences and Agriculture, and the School of Health Studies.

Approximately 60 percent of the University students request a change in major during their undergraduate years, and most are approved. These changes are possible after a student has been at the University for a semester and has secured permission from the appropriate college dean and department chairperson. However, the University cannot honor all requests for such changes; at present this is true for programs in administration, computer science, medical technology, nursing, occupational therapy, and the engineering fields.

### Admission Tests Requirements

All candidates for admission to bachelor's degree programs are required to submit the results of a College Entrance Examination Board Scholastic Aptitude Test. While achievement tests are not required, a score of 500 or higher received on foreign language achievement tests satisfies the foreign language requirement of the bachelor of arts degree programs. Students who have identified a specific major are encouraged to submit achievement test results relating to that major. For example, an engineering applicant could submit math and physics or chemistry test results.

### Art and Music Candidates

Candidates applying to any program within the Department of the Arts (except art history) are required to submit a portfolio to the department chairperson (telephone 603-862-2190). Candidates applying for programs in the Department of Music must make arrangements with the chairperson of that department for an audition (telephone 603-862-2404). Details regarding these requirements may be obtained from the departments or the Office of Admissions.

## Freshman Admission Application Deadlines

Except for early notification candidates, applications should be submitted after the first marking period grades are available and before February 1. Applications received after that date may be considered only as vacancies occur. A nonrefundable application fee, \$15 for New Hampshire residents and \$30 for nonresidents, must accompany the application.

Candidates who apply for regular admission by the February 1 application deadline will receive notification by mid-April. Accepted candidates are required to confirm their intention to enroll with the payment of an enrollment fee (\$150 in-state, \$300 out-of-state) by May 1.

## Early Notification

Between September 15 and December 1, the University considers well-qualified freshman applicants who desire fall enrollment under the early notification program. While it is not necessary that UNH be the first choice college, applicants should have carefully matched their objectives with the University's offerings and feel confident that their goals could be met at UNH. The University's early notification program places no obligation on the applicant to enroll if accepted for admission. The benefits for the successful early notification applicant are an early resolution of the question of admission to the University and priority with reference to the selection of a University residence hall if the student ultimately chooses to enroll. Unsuccessful early notification applicants will be reconsidered in the regular admissions process after receipt of senior year first marking term grades. Early notification applicants must submit a regular application, secondary school record, the results of a Scholastic Aptitude Test, and a counselor's letter of recommendation. Decisions will be returned by January 15 on all early notification candidates who have observed the application deadline.

## Deferred Admission

The University considers applicants for deferred admission, which enables students to reserve a space in college while taking time off from school for work or travel. The University may not be able to offer deferred admission in certain program areas, however.

## Advanced Standing

The University will recognize outstanding secondary school work by means of advanced placement and credit for those who have taken enriched or accelerated courses before entering college. Applicants qualify for such credit by satisfactory achievement on University-approved placement examinations, including the College Board Advanced Placement Tests, or through the College Level Examination Program (CLEP).

The University accepts College Board Advanced Placement Tests in nearly every subject area. The minimum score accepted is 3 with credit and course equivalency based on the score achieved. A score

of 4 or better is required in some foreign languages and for some mathematics courses.

The University recognizes credit for the College Level Examination Program. Up to 32 semester credits of General Examination tests may be applied as elective credit only. Scores must be 50 or better in each subarea of humanities, natural science, social science, or history. The minimum score for mathematics is 500 and for English, 610. Subject exams where applicable may be used to satisfy both departmental and General Education Requirements. Maximum credit accepted for all credit by exam or advanced placement testing is 64. Further information may be obtained from the Office of Admissions.

## Associate Degree Candidacy

The University accepts candidates for associate in applied science and associate in arts degree programs who have demonstrated ability and motivation for learning through secondary school achievement, work experience, and/or military service.

Both New Hampshire residents and out-of-state students may be considered for admission to associate in applied science degree programs offered by the University's Thompson School of Applied Science. Candidates applying from the senior year in high school must submit the results of a College Entrance Examination Board Scholastic Aptitude Test. Students granted freshman admission to the Thompson School are eligible for University residence hall accommodations. Two of the programs offered by the Thompson School, forest technology and civil technology, require that candidates present a minimum of two years of college preparatory mathematics (see also Thompson School chapter).

The University offers an associate in arts degree program through the Division of Continuing Education. While this program is available to both New Hampshire residents and out-of-state students, associate in arts degree candidates are not eligible for University residence hall housing because of space limitations (see also Associate in Arts chapter).

For information concerning associate in arts and associate in science degrees offered through the University of New Hampshire at Manchester, see page 92 or contact the University of New Hampshire at Manchester, 220 Hackett Hill Road, Manchester, N.H. 03102 (603-668-0700).

## Eligibility for Degree Candidacy

Applicants who meet the appropriate requirements for admission may become candidates for any undergraduate degree offered by the University. However, applicants having a degree will not be admitted into a program of study that awards the same degree (e.g., B.A., history, and B.A., zoology). Applicants may, however, be admitted into a program awarding a different degree (e.g., B.A., history, and B.S., biology; or B.A., history, and A.A.S., business management).

## Readmission

An undergraduate who withdraws, does not register for UNH coursework in a given semester, or