# BULLETIN OF THE UNIVERSITY OF NEW HAMP SHIRE. UNDERGRADUATE CATALOG 1985-1986

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# **VARIOUS**

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# UNIVERSITY OF NEW FAMP SHIRE

# UNIVERSITY OF NEW HAMPSHIRE

"depth
without
narrowness
and
breadth
without
superficiality"

WILLIAM D. GIBBS.

Third President of University of New Hampshire

Undergraduate Catalog 1985–1986



# 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 93.) 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, Director of Admissions (603) 862-1360.

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

# University Calendar 1985-86

# Summer Session 1985

May 27 to August 23

# Semester I

September 1, Sunday Residence halls open for freshmen

September 2, Monday Residence halls open for upperclass students Registration for new students

September 3, Tuesday Registration for continuing students

September 4, Wednesday Classes begin

September 9, Monday Graduate student registration

September 10, Tuesday Last day to withdraw and qualify for 3/4 tuition refund

September 13, Friday
Last day to drop courses without \$10 late drop

September 20, Friday
Last day to add courses without dean's approval
and without \$10 late add fee
Last day to drop courses or withdraw without
academic liability

Last day to choose pass/fail grading option Last day to carry more than 20 credits without a surcharge

October 3, Thursday Last day to withdraw and qualify for ½ tuition refund

October 25, Friday Midsemester

November 5, Tuesday Election Day—no exams can be scheduled.

November 11, Monday Veterans Day holiday—no classes-

November 27, Wednesday Classes hold Monday schedule

November 28-29, Thursday-Friday Thanksgiving Holiday

December 2, Monday Classes resume December 14, Saturday

Commencement

December 14, Saturday

Commencement

December 16, Monday

December 17, Tuesday Final exams begin

Reading Day

December 21, Saturday

# Semester II

January 19, Sunday Residence halls open

January 20-21, Monday-Tuesday Registration days

January 22, Wednesday Classes begin

January 27, Monday Graduate student registration

January 28, Tuesday Last day to withdraw and qualify for ¼ tuition refund

January 31, Friday Last day to drop courses without \$10 late drop

February 7, Friday
Last day to add courses without dean's approval
and without \$10 late add fee
Last day to drop courses or withdraw without
academic liability
Last day to choose pass/fail grading option
Last day to carry more than 20 credits without a
surcharge

February 20, Thursday Last day to withdraw and qualify for ½ tuition refund

March 17–21, Monday-Friday Spring Recess March 24, Monday

Classes resume March 28, Friday Midsemester

May 14-15, Wednesday-Thursday Reading Days

May 16, Friday Final exams begin

May 22, Thursday Final exams end

May 23, Friday Senior Day

May 24, Saturday Commencement

# Summer Session 1986

May 26 to August 22

The University reserves the right to modify the calendar subsequent to printing.

# 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 present campus in Durham 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.

Beginning in 1967, the University provided a widening range of undergraduate and graduate studies through its program at the Merrimack Valley Branch in Manchester. In 1977, the legislature recognized the branch as the Merrimack Valley College, the fourth campus in the University System. Under a proposal presented to the 1985 session of the New Hampshire legislature, the University of New Hampshire would reassume responsibility for Merrimack Valley College, The name would become the University of New Hampshire at Manchester. In 1972, the School of Continuing Studies was created to coordinate the offcampus educational programs of the University System institutions and to carry instructional services to communities throughout New Hampshire. In 1979, this school was renamed the School for Lifelong Learning.

In the 1984–85 academic year, the University had 10,612 degree candidates enrolled, including 454 in the Associate in Applied Science program of the Thompson School and 129 in the Associate in Arts program in the Division of Continuing Education. In the Division of Continuing Education, 1,556 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 semirural 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—72 for teaching, research, and service, and 36 residence halls for men and women.

University Library houses 854,209 volumes, 6,298 periodicals, 7,433 tapes and records, 2,015 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.

Atbletics-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 DECsystem-10s, 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 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 Admissions Office 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 Group Information Sessions led by an Admissions Office staff member and student representatives are followed by guided tours of the campus. Please call the Admissions Office (603-862-1360) for information about dates and times

## Admissions 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 foreign language, 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 are advised to 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.

The number of out-of-state students admitted to the University each year is limited. These candidates are asked to indicate their "prospective majors" on their application forms and will be considered for admission in competition with other out-of-state candidates applying for the same pro-

Candidates may 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. 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.

Approximately 60 percent of the University students request a change in major during their undergraduate years, and approximately 90 percent of such requests are approved each year. 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, it is important to realize that 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.

# Admissions 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, scores of 500 or higher received on the Foreign Language Achievement Tests may enable an applicant to satisfy the foreign language requirement of the Bachelor of Arts degree programs. Other achievement tests are strongly recommended for candidates to the College of Engineering and Physical Sciences, the College of Life Sciences and