



DEPARTMENT OF FOOD AND RESOURCE ECONOMICS

WHAT IS NATURAL RESOURCE MANAGEMENT?

Natural Resource Management combines economics, policy, and science in an effort to study and manage our natural resources and environment.

AREAS OF EMPHASIS AT DELAWARE

How best to manage endangered species? When is cap and trade likely to best solve pollution problems? What policies will enable the developing world to grow sustainably? These are just some of the questions investigated in the NRM major.

Natural Resource Management (NRM) majors enjoy the unique nature of an interdisciplinary program. Relying heavily on courses in the departments of Food and Resource Economics, Entomology and Wildlife Ecology, and Plant and Soil Sciences, NRM majors benefit from the experience and expertise of a variety of faculty.

The first year in the program includes courses in biology, chemistry, mathematics, and economics. Throughout the undergraduate years, students are exposed to courses in environmental policy, statistics, chemistry, computer applications and resource economics. They also choose from nine categories of courses (see reverse side) to create the curriculum most suited to individual interests. A wide choice of electives and breadth requirements are also part of the program, where students select courses in social sciences, humanities, arts, and literature to ensure breadth in the undergraduate experience.

WHAT'S SPECIAL ABOUT THE PROGRAM?

Our goal is to provide students with the skills to solve practical problems. We encourage a solid understanding of natural sciences, mathematics and statistics, economics and public policy, and we want students to have sound, basic knowledge of biodiversity. We also emphasize strong communication skills and computer competence. To ensure greatest chances for success in these areas, a faculty advisor works closely with each student to create a "plan of action" best suited to individual career goals. The interdisciplinary nature of the program benefits students as they get to know faculty in three of our departments, allowing for exposure to a diversity of opinions, ideas, research projects, internships, and more!

Many students in the NRM major have an interest in legal or economic systems, and a devotion to the environment. As a way to satisfy these interests outside of their academic debates in class, students participate in a variety of related activities, like Students for the Environment, the Wildlife Conservation Club, or the Outing Club. Many also work with faculty members on research projects or participate in off-campus internships to bolster their understanding of natural resource management.

FACILITIES AND RESOURCES

The College of Agriculture and Natural Resources houses the NRM major, and its facilities are readily accessible to students. Our

350-acre, on-campus complex includes a working farm, 35-acre woods, a habitat trail, a greenhouse laboratory and expansive gardens. Townsend and Worriow Halls contain our offices, classrooms, laboratories, library, student commons, as well as a modern computing site with state-of-the-art software like geographic information systems and computer aided design. We are also fortunate to be close to several natural areas, farms, inland bays, and other sites that serve as great field-trip sites, allowing students to view nature and "real world problems" with their classmates and professors.

CAREER PATHS

Environmental Scientist. Environmental consultant. Environmental lawyer. Nature educator. These are just a few of the careers that are possible in law, government agencies, industry, and consulting firms. While entry-level positions do exist, some careers will require additional education beyond the bachelor's degree. Graduates of the NRM program may be qualified to pursue graduate work in areas like conservation biology, resource economics, environmental law, and public policy.

Whatever your goal, we will encourage you to participate in our job-search workshops and career days, to seek an internship, to develop your communication skills and to learn to network with prospective employers. This, in addition to doing well academically, will greatly enhance your post-graduate opportunities.

THE NATURAL RESOURCE MANAGEMENT CURRICULUM

Starting with the first semester, Natural Resource Management majors have at least one course in the major each semester. To earn a bachelor's degree, students must complete **130 credits** and meet specific requirements, as outlined in the *University of Delaware Undergraduate Catalog*. Each semester's courses will vary, depending on the student's concentration, background, and academic preparation. **The following plan is only one example; not every student will take every course in the same order. Most students take 12 -17 credits per term;** Winter and Summer sessions may be used to lighten the loads of regular semesters.

FRESHMAN YEAR

FALL SEMESTER

Economics of Agriculture and Natural Resources (3 cr.) *Introduction to economic and management principles and their applications to agribusiness, natural resources and the environment.*

Introduction to Data Analysis (3 cr.) *Emphasis on microcomputer application programs, including spreadsheets, graphics, database management, electronic communications and word processing.*

General Chemistry (4 cr.) *Fundamental laws of chemical action and the properties and uses of elements and compounds. Includes one 3-hr. lab/week.*

Mathematics (3 cr.) *The first math course is determined by the student's background, SAT scores, and a math placement test.*

First Year Seminar (1 cr.) *An introduction to the University of Delaware and strategies for success.*

SPRING SEMESTER

Critical Reading and Writing (3 cr.) *Expository & argumentative composition through analysis of select readings.*

General Chemistry II (4 cr.) *A continuation of first-semester chemistry. Includes one 3-hr. lab/week.*

Mathematics (3 cr.) *Next course needed. (Calculus II is required for graduation.)*

Wildlife Conservation and Ecology (3 cr.) *Natural history of North American wildlife; general principles of ecology; ecological and sociological problems and solutions in wildlife conservation.*

*^Breadth/Group Requirements (3 – 6 cr.)

* *There's a total of 21 University and College Breadth credits required for this degree including a minimum of nine credits from any three different College of Agriculture and Natural Resources subject area codes, outside the subject area codes of the student's major. Twelve credits are required (3 from each) from the following categories: Creative Arts and Humanities; History and Cultural Change; Social and Behavioral Sciences; Mathematics, Natural Sciences and Technology. At least one course in multicultural studies must be taken to fulfill graduation requirements.*

Foreign Language is recommended, but not required. At least one course in multicultural studies must be taken to fulfill graduation requirements.

^ Group Requirements include courses in Communications (6 cr.), Statistics (6 cr.), Ecosystems (6 cr.), Plants & Animals (6 cr.), Land & Water Management (6 cr.), Natural Resource/Environmental Policy (9 cr.) and Ethics (3 cr.). Students will select specific courses from offerings in each of these groups. Breadth Requirements may also be used to fulfill College Requirements and vice versa.

SOPHOMORE YEAR

Introductory Biology I (4 cr.)

Introductory Biology II (4 cr.)

Introduction to Soil Science (4 cr.)

Introduction to Microeconomics (3 cr.)

Introduction to Macroeconomics (3 cr.)

*^ Breadth/Group Requirements (8 cr.)

JUNIOR YEAR

Geographic Information Systems in Natural

Resource Management (4 cr.)

Resource Economics: Theory and Policy (3 cr.)

*Breadth Requirements (3-6 cr.)

^Group Requirements(12-21 cr.)

Topics in Environmental Law (3 cr.)

Electives (3 - 6 cr.)

SENIOR YEAR

Environmental Economics (3 cr.)

*Breadth Requirements (3-6 cr.)

^Group Requirements (12-21 cr.)

Electives (3 - 6 cr.)

FOR MORE INFORMATION

You are welcome to come talk with us about our majors and the ways in which we can help you reach your goals. Please contact us:



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