NATURAL RESOURCES AND THE ENVIRONMENT (M.S.)

https://colsa.unh.edu/natural-resources-environment/program/ms/natural-resources-environment

Description

The Department of Natural Resources and the Environment offers a Master of Science program that provides advanced, research-based study in the ecology, biogeochemistry, economics, policy, and management of vital natural resources, including water, soil, forests, wildlife, and agricultural crops. Students take an interdisciplinary approach to their research and use the tools of the natural and social sciences, including geospatial methods, to make fundamental and significant contributions toward local, regional, and global sustainability.

Students are supported by a highly productive and internationally recognized faculty, outstanding laboratory facilities, and a diversity of accessible terrestrial, marine, and freshwater field sites. Research conducted by faculty and graduate students has resulted in UNH being ranked second of 316 North American institutions in scholarly contributions to the field of ecology.

Possible career trajectories are diverse. Some graduates pursue private sector environmental and social science consulting. Others seek positions in planning, environmental protection, research, or resource management with federal or state agencies (e.g., NOAA, USDA, EPA, NRCS), private industry, or with non-governmental organizations. Graduates from the environmental economics option may also find careers in agribusiness or banking. Graduates may choose to pursue advanced study at the doctoral level.

Students may choose to specify one of five options:

- Ecosystem Science
- Environmental Conservation and Sustainability
- Environmental Economics
- Forestry
- Wildlife and Conservation Biology

Requirements

Degree Requirements

An M.S. degree is conferred upon successful completion of a program of not less than 30 credits for natural resources options: forestry, environmental conservation, environmental economics, general, soil and water resource management, and wildlife and conservation biology.

Course Requirements or Equivalents

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 904</td>
<td>Qualitative Inquiry in Education (Policy oriented)</td>
<td>4</td>
</tr>
<tr>
<td>Or</td>
<td>NR 903 Approach to Research</td>
<td>2</td>
</tr>
<tr>
<td>And with NR 903, choose one of the following additional research methods classes for a total of 4 credits:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>NR 905 Grant Writing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An approved program of study plan is required during the first semester.

BIOL 902 Writing and Publishing Science
BIOL 950 Scientific Communication
Or an alternative with approval from the Graduate Coordinator
NR 993 Natural and Environmental Resources Seminar 1-4
or NR 947 Ecosystem Science: Theory, Practice, and Management Applications for Sustainability
NR 996 Natural Resource Education (1 credit ) 1 - 2
or LSA 900 College Teaching
Select one of the following Quantitative methods courses: 3-4

BIOL 811 Experimental Design & Analysis
BIOL 933
DATA 800 Introduction to Applied Analytic Statistics
ECON 926 Econometrics I
ESCI 801 Quantitative Methods in Earth Sciences
MATH 835 Statistical Methods for Research
MATH 840 Design of Experiments I
MATH 969 Topics in Probability and Statistics I
NR 909 Analysis of Ecological Communities and Complex Data
NR 913 Quantitative Ecology
POLT 905 Introduction to Statistical Analysis
PSYC 905 Research Methodology and Statistics I
PSYC 907 Research Methods and Statistics II
SOC 901 Sociological Methods I: Intermediate Social Statistics
SOC 903 Sociological Methods III: Advanced Social Statistics
SOC 904 Sociological Methods IV: Qualitative and Historical Research Methods

Select one of the following:

- NR 899 Master’s Thesis (and a formal presentation of the thesis) 1
- NR 998 Directed Research (and directed research results) 2

1 The thesis option will provide a research-based thesis that is the foundation for a peer-reviewed publication.
2 The directed research option shall consist of a project, designed and conducted by the student, culminating in a scholarly paper or report that is suitable for publication in the respective field of scholarship.

An approved program of study plan is required during the first semester.