ENVIRONMENTAL AND RESOURCE ECONOMICS MAJOR (B.S.)

https://colsa.unh.edu/natural-resources-environment/program/bs/environmental-resource-economics-major

Description

Students majoring in environmental and resource economics will normally concentrate in one of the following three areas: environmental and natural resource economics, agricultural economics, or community economics. One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning (e.g., honors thesis, mentored research project, and other special student activity). In addition, students must satisfy University requirements, including those for the Discovery Program.

Upon graduation, students are qualified for a wide variety of opportunities. Private business, public institutions, and government agencies currently have a strong demand for specialists trained in natural resource development; land and water use policy; natural resource and small business management; agricultural, fisheries, and forestry marketing; and community development. In many cases, students may wish to improve their qualifications by pursuing more specialized graduate studies.

Requirements

Degree Requirements

Minimum Credit Requirement: 128 credits

Minimum Residency Requirement: 32 credits must be taken at UNH

Minimum GPA: 2.0 required for conferral*

Core Curriculum Required: Discovery & Writing Program Requirements

Foreign Language Requirement: No

All Major, Option and Elective Requirements as indicated.

*Major GPA requirements as indicated.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 401</td>
<td>Principles of Economics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 411</td>
<td>Environmental and Resource Economics Perspectives (or equivalent)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 424B</td>
<td>Calculus for Life Sciences</td>
<td>4</td>
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Select at least five of the following, two must be 700 level:

EREC 572 | Introduction to Natural Resource Economics                | 4       |
EREC 606 | Land Economics Perspectives: Uses, Policies, and Taxes     | 4       |
EREC 627 | Community Economics                                       | 4       |
EREC 708 | Environmental Economics                                   | 4       |
EREC 756 | Rural and Regional Economic Development                    | 4       |
ANSC 548 | Agricultural Business Management                           | 4       |
NR 602  | Natural Resources and Environmental Policy                 | 4       |
NR 643  | Economics of Forestry                                     | 4       |
CEP 614  | Fundamentals of Planning                                  | 4       |
CEP 777  | Topics in Community Planning                              | 4       |
TOUR 767 | Social Impact Assessment                                  | 4       |

Capstone

The capstone can be fulfilled through a course (EREC 708, EREC 756, CEP 777 or TOUR 767), or a created work or product, or some form of experiential learning (e.g., honors thesis, mentored research projects in EREC 795, EREC 799, and other special student activities)

1 EREC 411 cannot be used to satisfy the Social Science Discovery program requirement; or taken for credit if credit has been earned for ECON 402.
2 Offered once a semester by Economics Department

Degree Plan

First Year

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 401</td>
<td>First-Year Writing</td>
<td>4</td>
</tr>
<tr>
<td>Discovery: Biological Science with Lab</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>ECON 401</td>
<td>Principles of Economics (Macro)</td>
<td>4</td>
</tr>
<tr>
<td>NR 435</td>
<td>Contemporary Conservation Issues and Environmental Awareness (or another Discovery ETS course)</td>
<td>4</td>
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Spring

<table>
<thead>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EREC 411</td>
<td>Environmental and Resource Economics Perspectives</td>
<td>4</td>
</tr>
<tr>
<td>Discovery: Physical Science</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Discovery: Fine and Performing Arts</td>
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<td>4</td>
</tr>
</tbody>
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Credits 16

Second Year

Fall

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EREC 525</td>
<td>Statistical Methods and Applications</td>
<td>4</td>
</tr>
<tr>
<td>Elective or Course for Minor</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Discovery: Historical Perspectives</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Discovery: World Cultures</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Credits 16

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EREC 572</td>
<td>Introduction to Natural Resource Economics</td>
<td>4</td>
</tr>
<tr>
<td>Discovery: Humanities</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Elective or Course for Minor</td>
<td></td>
<td>4</td>
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</tbody>
</table>

Credits 16
Elective or Course for Minor  4

Credits  16

**Third Year**

**Fall**

EREC 627 Community Economics  4
or CEP 614 or Fundamentals of Planning
or NR 602 or Natural Resources and
Environmental Policy

ECON 611 Intermediate Macroeconomic Analysis  4
or ECON 635 Money and Banking

Elective or Course for Minor  4

Elective or Course for Minor  4

Credits  16

**Spring**

ECON 605 Intermediate Microeconomic Analysis  4

EREC 606 Land Economics Perspectives: Uses, Policies, and Taxes  4
or NR 643 or Economics of Forestry

Elective or Course for Minor  4

Elective or Course for Minor  4

Credits  16

**Fourth Year**

**Fall**

EREC 708 Environmental Economics  4
or TOUR 767 or Social Impact Assessment

Elective or Course for Minor  4

Elective or Course for Minor  4

Elective or Course for Minor  4

Credits  16

**Spring**

EREC 756 Rural and Regional Economic Development  4
or CEP 777 or Topics in Community Planning

Elective or Course for Minor  4

Elective or Course for Minor  4

Elective or Course for Minor  4

Credits  16

Total Credits  128

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1 At least one Discovery course must have the Inquiry attribute.
2 The student must take at least 2 Writing-Intensive courses in addition to any of the following: EREC 708 Environmental Economics, EREC 756 Rural and Regional Economic Development, and CEP 777 Topics in Community Planning.

**Student Learning Outcomes**

Students will be able to:

- Evaluate the validity and limitations of scientific theories and claims about the environment;
- Describe and explain the interactions among physical, biological, chemical, and human components of the environment;
- Formulate tests of environmental questions, acquire data, and apply scientific methods to answer these questions;
- Characterize the various social drivers of environmental problems and the relative attributes of policy instrument solutions;
- Locate, evaluate, and summarize print and electronic media including peer-reviewed literature and then compose and deliver informed positions on current environmental problems to the public.
- Describe and explain the ecological and societal value of biodiversity, sustainability, and environmental stewardship;
- Master mathematical, statistical, and study design knowledge and skills, and use state-of-the-art software, hardware, and analytical techniques relevant to environmental conservation and sustainability;
- Use principles of ecology, economics, sustainability, and policy science to solve real-world environmental problems;
- Communicate effectively to peers within the environmental community and with audiences outside of the discipline.