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

Code	Title	Credits
Required Courses		
Principles of Economics		
ECON 401	Principles of Economics (Macro)	4
EREC 411	Environmental and Resource Economics Perspectives (or equivalent) [1]	4
Intermediate Economic Theory		
ECON 611	Intermediate Macroeconomic Analysis [2]	4
or ECON 635	Money and Banking	
ECON 605	Intermediate Microeconomic Analysis [2]	4
Quantitative Methods		
EREC 525	Statistical Methods and Applications	4
MATH 420	Finite Mathematics	4
or MATH 424B	Calculus for Life Sciences	
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 theses, 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

Students are encouraged to consider adding additional courses from the economics (ECON) department to their program. In special cases, students may petition to have these courses, particularly ECON 706 and ECON 726, substitute for major EREC electives.

Degree Plan

First Year		
Fall		**Credits**
ENGL 401	First-Year Writing	4
Discovery: Biological Science with Lab [1]		4
ECON 401	Principles of Economics (Macro)	4
NR 435	Contemporary Conservation Issues and Environmental Awareness (or another Discovery ETS course)	4
	Credits	**16**
Spring		
EREC 411	Environmental and Resource Economics Perspectives	4
Discovery: Physical Science		4
MATH 420	Finite Mathematics	4
Discovery: Fine and Performing Arts		4
	Credits	**16**
Second Year		
Fall		
EREC 525	Statistical Methods and Applications	4
Elective or Course for Minor		4
Discovery: Historical Perspectives		4
Discovery: World Cultures		4
	Credits	**16**
Spring		
EREC 572	Introduction to Natural Resource Economics	4
Discovery: Humanities		4
Elective or Course for Minor		4

Elective or Course for Minor		4
	Credits	**16**
Third Year		
Fall		
EREC 627 or CEP 614 or NR 602	Community Economics or Fundamentals of Planning or Natural Resources and Environmental Policy	4
ECON 611 or ECON 635	Intermediate Macroeconomic Analysis or Money and Banking	4
Elective or Course for Minor		4
Elective or Course for Minor		4
	Credits	**16**
Spring		
ECON 605	Intermediate Microeconomic Analysis	4
EREC 606 or NR 643	Land Economics Perspectives: Uses, Policies, and Taxes or Economics of Forestry	4
Elective or Course for Minor		4
Elective or Course for Minor		4
	Credits	**16**
Fourth Year		
Fall		
EREC 708 or TOUR 767	Environmental Economics [2] or Social Impact Assessment	4
Elective or Course for Minor		4
Elective or Course for Minor		4
Elective or Course for Minor		4
	Credits	**16**
Spring		
EREC 756 or CEP 777	Rural and Regional Economic Development [3] or Topics in Community Planning	4
Elective or Course for Minor		4
Elective or Course for Minor		4
Elective or Course for Minor		4
	Credits	**16**
	Total Credits	**128**

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.

3 EREC 708 Environmental Economics, EREC 756 Rural and Regional Economic Development, EREC #760 Ecological-Economic Modeling for Decision Making, CEP 777 Topics in Community Planning, and TOUR 767 Social Impact Assessment satisfy the capstone requirement for the major.

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.