ENVELOPMENTAL STUDIES (CAS)

Description
Website: esp.unl.edu (http://esp.unl.edu)

The environmental studies major is designed for students who want to make a difference and contribute to solving environmental challenges on a local to global scale. Solutions to challenges such as climate change, pollution, and resource conservation require individuals who have a broad-based knowledge in the natural and social sciences, as well as strength in a specific discipline. The environmental studies major will provide the knowledge and skills needed for students to work across disciplines and to be competitive in the job market. The environmental studies program uses a holistic approach and a framework of sustainability. This framework recognizes the necessity of meeting current resource needs without compromising the environment or the ability of future generations to meet their needs.

Options in the Major
Students may choose to focus their advanced coursework in ways that meet their specific interests and career goals. All students complete a core set of requirements and can determine in consultation with faculty and their academic advisor which specific option to follow. The option will be documented on the final transcript.

Policy, Advocacy, and Social Justice Option
Within the context of the environment, this option provides disciplinary knowledge and proficiency as well as social research skills related to negotiation, advocacy, and discourse; human behavior change; public policy; and social justice and diversity.

Biosphere and Earth Systems Studies Option
Within the context of the environment, this option provides disciplinary knowledge and proficiency in collection, synthesis, and interpretation of information/data in one of four science-based subdiscipline areas—Earth Systems, Climate, Ecological Systems, and Geospatial technologies.

Additional minor program opportunities: Students interested in environmental studies may choose to minor in it through the College of Arts and Sciences or through the environmental education minor or sustainability solutions minor in the College of Agricultural Sciences and Natural Resources, both of which are available to CAS students.

College Admission
The entrance requirements for the College of Arts and Sciences (CAS), including any of the majors or minors offered through the college, are the same as the UNL General Admission Requirements. In addition to these requirements, the College of Arts and Sciences strongly recommends a third and fourth year of one foreign language in high school. Four years of high school coursework in the same language will fulfill the College of Arts and Sciences’ language requirement. It will also allow students to continue language study at a more advanced level at UNL and provide more opportunity to study abroad.

ACADEMIC AND CAREER Advising
Academic and Career Advising Center
The Academic and Career Advising Center in 107 Oldfather Hall is the undergraduate hub for CAS students in all majors. Centrally located and easily accessed, students encounter friendly, knowledgeable people who are eager to help. Students visit the Advising Center in 107 Oldfather Hall to:

- Choose or change their major, minor, or degree program.
- Check in on policies, procedures, and deadlines.
- Get a college approval signature from the Dean’s representative, Sr. Director of Advising and Student Success.

While the assigned academic advisor should be the student’s primary contact, there are daily walk-ins from 12-3 where a general academic advisor can answer a quick question. In addition, the CAS Career Coaches are located here. They help students explore majors and minors, gain experience, and develop a plan for life after graduation. Not sure where to go or who to ask? The Advising Center team can help.

Assigned Academic Advisors
Academic advisors are critical resources dedicated to students’ academic, personal, and professional success. Every CAS student is assigned an academic advisor based on their primary major. Since most CAS students have more than just a single major, it is important to get to know the advisor for any minors or additional majors. Academic advisors work closely with the faculty to provide the best overall support and the discipline-specific expertise.

Assigned advisors are listed in MyRED (https://its.unl.edu/myunl) and their offices may be located in or near the department of the major for which they advise or in the Academic and Career Advising Center. Students who have declared a pre-health or pre-law area of interest will also work with advisors in the Exploratory and Pre-Professional Advising Center (Explore Center) in 127 Love South, who are specially trained to guide students preparing to enter a professional school.

For complete and current information on advisors for majors, minors, or pre-professional areas, contact the Arts and Sciences Academic and Career Advising Center, 107 Oldfather Hall, 402-472-4190, http://cas.unl.edu/advising.

Career Coaching
The College believes that Academics + Experience = Opportunities and encourages students to complement their academic preparation with real-world experience, including internships, research, education abroad, service, and leadership. Arts and sciences students have access to a powerful network of faculty, staff, and advisors dedicated to providing information and support for their goals of meaningful employment or advanced education. Arts and sciences graduates have unlimited career possibilities and carry with them important career competencies—communication, critical thinking, creativity, context, and collaboration. They have the skills and adaptability that employers universally value. Graduates are not only prepared to effectively contribute professionally in the real world, but they have a solid foundation to excel in an increasingly global, technological, and interdisciplinary world.

Students should contact the career coaches in the Arts and Sciences Academic and Career Advising Center in 107 Oldfather, or their assigned advisor, for more information. The CAS career coaches help students explore career options, identify ways to build experience, and prepare to apply for internships, jobs, or graduate school, including help with resumes, applications, and interviewing.
ACE Requirements

Students must complete one course for each of the ACE Student Learning Outcomes below. Certified course choices are published in the degree audit, or visit the ACE website (http://ace.unl.edu) for the most current list of certified courses.

ACE Student Learning Outcomes

ACE 1: Write texts, in various forms, with an identified purpose, that respond to specific audience needs, integrate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure.

ACE 2: Demonstrate competence in communication skills.

ACE 3: Use mathematical, computational, statistical, logical, or other formal reasoning to solve problems, draw inferences, justify conclusions, and determine reasonableness.

ACE 4: Use scientific methods and knowledge to pose questions, frame hypotheses, interpret data, and evaluate whether conclusions about the natural and physical world are reasonable.

ACE 5: Use knowledge, historical perspectives, analysis, interpretation, critical evaluation, and the standards of evidence appropriate to the humanities to address problems and issues.

ACE 6: Use knowledge, theories, and research perspectives such as statistical methods or observational accounts appropriate to the social sciences to understand and evaluate social systems or human behaviors.

ACE 7: Use knowledge, theories, or methods appropriate to the arts to understand their context and significance.

ACE 8: Use knowledge, theories, and analysis to explain ethical principles and their importance in society.

ACE 9: Exhibit global awareness or knowledge of human diversity through analysis of an issue.

ACE 10: Generate a creative or scholarly product that requires broad knowledge, appropriate technical proficiency, information collection, synthesis, interpretation, presentation, and reflection.

College Distribution Requirements

College Distribution Requirements – BA and BS

The College of Arts and Sciences distribution requirements are common to both the bachelor of arts and bachelor of science degrees and are designed to ensure a range of courses. By engaging in study in several different areas within the College, students develop the ability to learn in a variety of ways and apply their knowledge from a variety of perspectives. All requirements are in addition to University ACE requirements, and no course can be used to fulfill both an ACE outcome and a College Distribution Requirement.

- A student may not use a single course to satisfy more than one College Distribution Requirement, with the exception of CDR Diversity. Courses used to meet CDR Diversity may also meet CDR Writing, CDR Humanities, or CDR Social Science.
- Independent study or reading courses and internships cannot be used to satisfy distribution requirements.
- Courses from interdisciplinary programs will be applied in the same area as courses from the home/cross-listed department.

College Distribution Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDR: Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>Select from courses approved for ACE outcome 1.</td>
<td></td>
</tr>
<tr>
<td>CDR: Natural, Physical, and Mathematical Sciences with Lab</td>
<td>4</td>
</tr>
<tr>
<td>Select from biochemistry, biological sciences, chemistry, computer science, geology, meteorology, mathematics, physics, and statistics. Must include one lab in the natural or physical sciences. Lab courses may be selected from biochemistry, biological sciences, chemistry, geology, meteorology, and physics.</td>
<td></td>
</tr>
<tr>
<td>Some courses from geography and anthropology may also be used to satisfy the lab requirement above. 1</td>
<td></td>
</tr>
<tr>
<td>CDR: Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Select from classics, English, history, modern languages and literatures, philosophy, and religious studies. 2</td>
<td></td>
</tr>
<tr>
<td>CDR: Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Select from anthropology, communication studies, geography, political science, psychology, or sociology. 3</td>
<td></td>
</tr>
<tr>
<td>CDR: Human Diversity in U.S. Communities</td>
<td>0-3</td>
</tr>
<tr>
<td>Select from a set of approved courses as listed in the degree audit.</td>
<td></td>
</tr>
<tr>
<td>CDR: Language</td>
<td>0-16</td>
</tr>
<tr>
<td>Fulfilled by the completion of the 6-credit-hour second-year sequence in a single foreign language in one of the following departments: Classics and religious studies or modern languages and literatures. Instruction is currently available in Arabic, Chinese, Czech, French, German, Greek, Japanese, Latin, Russian, and Spanish.</td>
<td></td>
</tr>
<tr>
<td>A student who has completed the fourth-year level of one foreign language in high school is exempt from the languages requirement, but encouraged to continue on in their language study.</td>
<td></td>
</tr>
<tr>
<td>Credit Hours Subtotal:</td>
<td>13-32</td>
</tr>
<tr>
<td>1   See Degree Audit or a College of Arts and Sciences advisor for approved geography and anthropology courses that apply as natural science.</td>
<td></td>
</tr>
<tr>
<td>2   Language courses numbered 220 and below do not fulfill the CDR Humanities.</td>
<td></td>
</tr>
<tr>
<td>3   See Degree Audit or College of Arts and Sciences advisor for list of natural/physical science courses in anthropology, geography, and psychology that do not apply as social science.</td>
<td></td>
</tr>
</tbody>
</table>

Language Requirement

UNL and the College of Arts and Sciences place great value on academic exposure and proficiency in a second language. The UNL entrance requirement of two years of the same foreign language or the College's language distribution requirement (CDR: Language) will rarely be waived and only with relevant documentation. See the main College of Arts and Sciences page for more details.

Scientific Base - BS Only

The bachelor of science degree requires students to complete 60 hours in mathematical, physical, and natural sciences. Approved courses for scientific base credit come from the following College of Arts and Sciences disciplines: actuarial science, anthropology (selected courses), astronomy, biochemistry (excluding BIOC 101), biological
initiating the appeal in the semester following the awarding of the grade:

A student who feels that he/she has been unfairly graded must ordinarily

regulations:

The College of Arts and Sciences adheres to the University regulations

Pass/No Pass Privilege

College of Arts and Sciences departments to be degree applicable.

Pass/No Pass Privilege

The College of Arts and Sciences adheres to the University regulations

Grade Rules

Restrictions on C- and D Grades

The College will accept no more than 15 semester hours of C- and D

grades from other domestic institutions except for UNO and UNK. All

courses taken at UNO and UNK impact the UNL transcript. No transfer

of C- and D grades can be applied toward requirements in a major or a

minor. No UNL C- and D grades can be applied toward requirements in a

major or a minor. International coursework (including education abroad)

with a final grade equivalent to a C- or lower will not be validated by

College of Arts and Sciences departments to be degree applicable.

Pass/No Pass Privilege

The College of Arts and Sciences adheres to the University regulations

for the Pass/No Pass (P/N) privilege with the following additional

regulations:

• Pass/No Pass hours can count toward fulfillment of University ACE

requirements and college distribution requirements up to the 24-hour

maximum. 

• Most arts and sciences departments and programs do not allow

courses graded Pass/No Pass to apply to the major or minor. 

Students should refer to the department’s or program’s section of the

catalog for clarification. By college rule, departments can allow up to

6 hours of Pass/No Pass in the major or minor. 

• Departments may specify that certain courses of theirs can be taken

only on a P/N basis. 

• The college will permit no more than a total of 24 semester hours

of P/N grades to be applied toward degree requirements. This total

includes all Pass grades earned at UNL and other U.S. schools. NOTE:

This 24-hour limit is more restrictive than the University regulation.

Grading Appeals

A student who feels that he/she has been unfairly graded must ordinarily

take the following sequential steps in a timely manner, usually by

initiating the appeal in the semester following the awarding of the grade:

1. Talk with the instructor concerned. Most problems are resolved at

this point.

2. Talk to the instructor’s department chairperson.

3. Take the case to the Grading Appeal Committee of the department

concerned. The Committee should be contacted through the

department chairperson.

4. Take the case to the College Grading Appeals Committee by

contacting the Dean’s Office, 1223 Oldfather Hall.

Course Level Requirements

Courses Numbered at the 300 or 400 Level

Thirty (30) of the 120 semester hours of credit must be in courses

numbered at the 300 or 400 level. Of those 30 hours, 15 hours (1/2) must

be completed in residence at UNL.

Residency Requirement

Students must complete at least 30 of the 120 total hours for their degree

at UNL. Students must complete at least 1/2 of their major coursework,

including 6 hours at the 300 or 400 level in their major and 15 of the 30

hours required at the 300 or 400 level, in residence. Credit earned during

education abroad may be used toward the residency requirement only if

students register through UNL.

Catalog to Use

Students must fulfill the requirements stated in the catalog for the

academic year in which they are first admitted to and enrolled as a

degree-seeking student at UNL. In consultation with advisors, a student

may choose to follow a subsequent catalog for any academic year in

which they are admitted to and enrolled as a degree-seeking student at

UNL in the College of Arts and Sciences. Students must complete all

degree requirements from a single catalog year. Beginning in 1990-1991,

the catalog which a student follows for degree requirements may not be

more than 10 years old at the time of graduation.

Learning Outcomes

Graduates of environmental studies will be able to:

1. Explain and apply appropriately the systemic principle of

sustainability for the development of solutions to environmental and

natural resource issues.

2. Organize, plan, and satisfactorily complete a senior project through

scholarly creativity and/or in-depth research that uses appropriate

technical knowledge, field, laboratory, geospatial, and/or social

science research methodologies.

3. Demonstrate the ability to critically assess environmental and

sustainability issues from the local to global scale considering a

range of perspectives.

4. Identify, explain, and evaluate problems/questions/issues using

relevant data, resources, and reasoning to form carefully considered

conclusions.

5. Communicate effectively to a range of audiences through the

preparation of written documents along with oral and visual

presentations that are consistent with professional standards.

6. Describe the Earth’s four major spheres: land, water, living things, and

air in the context of physical, geological, and biological processes;

their variability over space and time; and the extent to which humans

influence them.

7. Effectively work in teams and groups from various backgrounds and

perspectives to address environmental challenges.

8. Demonstrate improvement in professional and interpersonal skills

such as collaboration, critical thinking, problem solving, empathy, and

teamwork to effectively operate in society and the professional world.
Major Requirements

Environmental studies core requirements plus completion of one of the options: Policy, Advocacy, and Social Justice or Biosphere and Earth Systems Studies.

Core Requirements

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 101</td>
<td>Environmental Studies Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 201</td>
<td>Science, Systems, Environment and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 249</td>
<td>Individual and Cultural Perspectives on the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 319</td>
<td>Environmental Engagement and the Community</td>
<td>2</td>
</tr>
<tr>
<td>ENVR 495</td>
<td>Internship in Environmental Studies</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 499A</td>
<td>Environmental Studies Senior Thesis I I</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 499B</td>
<td>Environmental Studies Senior Thesis II</td>
<td>2</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 13

Option Courses

Complete the requirement for one of the two options: Policy, Advocacy, and Social Justice or Biosphere and Earth Systems Studies. See below for specific option requirements.

1 ENVR 499A & ENVR 499B are the capstone courses for environmental studies majors. ENVR 499H is the capstone course for Honors students.

Policy, Advocacy, and Social Justice Option

Natural Science Foundations

Select a course or sequence from five of the following areas: 17-20

<table>
<thead>
<tr>
<th>Science Area</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Science</td>
<td>BIOS 101</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; BIOS 101L</td>
<td>and General Biology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or LIFE 120</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; 120L</td>
<td>and Fundamentals of Biology I laboratory</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 105</td>
<td>Chemistry in Context I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 109</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 113</td>
<td>Fundamental Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Ecology</td>
<td>BIOS 207</td>
<td>Ecology and Evolution</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or NRES 220</td>
<td>Principles of Ecology</td>
<td>4</td>
</tr>
</tbody>
</table>

Earth Systems

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>Dynamic Earth</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 106</td>
<td>Environmental Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 155</td>
<td>Elements of Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 181</td>
<td>Quality of the Environment</td>
<td>4</td>
</tr>
<tr>
<td>NRES 108</td>
<td>Earth's Natural Resource Systems Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ENSC 110</td>
<td>Energy in Perspective</td>
<td>4</td>
</tr>
</tbody>
</table>

Climate

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRES 104</td>
<td>Climate in Crisis</td>
<td>4</td>
</tr>
<tr>
<td>METR 100</td>
<td>Weather and Climate</td>
<td>4</td>
</tr>
</tbody>
</table>

Option Courses

Select at least one course from each of the following areas, with at least 9 hours at the 300 or 400 level. 21-22

Negotiation, Advocacy, and Discourse

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 209</td>
<td>Public Speaking</td>
<td>4</td>
</tr>
<tr>
<td>COMM 212</td>
<td>Debate</td>
<td>4</td>
</tr>
<tr>
<td>COMM 220</td>
<td>Public Advocacy and Civic Engagement</td>
<td>4</td>
</tr>
<tr>
<td>COMM 250</td>
<td>Rhetoric, Media, and Civic Life</td>
<td>4</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Argumentation</td>
<td>4</td>
</tr>
<tr>
<td>COMM 355</td>
<td>Community and Identity in the Digital Age</td>
<td>4</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Theories of Persuasion</td>
<td>4</td>
</tr>
</tbody>
</table>

Human Behavior and Change

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 473</td>
<td>Ecological Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>COMM 271</td>
<td>Organizing Social Change</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 283</td>
<td>Space, the Environment and You</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 450</td>
<td>Climate and Society</td>
<td>4</td>
</tr>
<tr>
<td>NRES 315</td>
<td>Human Dimensions of Fish and Wildlife Management</td>
<td>4</td>
</tr>
<tr>
<td>POLS 250</td>
<td>Genetics, Brains, and Politics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 288</td>
<td>The Psychology of Social Behavior</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 334</td>
<td>Psychology of Environmental Sustainability</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 346</td>
<td>Environmental Sociology</td>
<td>4</td>
</tr>
</tbody>
</table>

Power, Politics, and Policy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 225</td>
<td>Environmental Ethics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 100</td>
<td>Power and Politics in America</td>
<td>4</td>
</tr>
<tr>
<td>POLS 108</td>
<td>Political Ideas</td>
<td>4</td>
</tr>
<tr>
<td>POLS 221</td>
<td>Politics in State and Local Governments</td>
<td>4</td>
</tr>
<tr>
<td>POLS 332</td>
<td>Climate Change: Policy and Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 334</td>
<td>Polls, Politics and Public Opinion</td>
<td>4</td>
</tr>
<tr>
<td>POLS 430</td>
<td>Political Communication</td>
<td>4</td>
</tr>
<tr>
<td>AECN 357</td>
<td>Natural Resource and Environmental Law</td>
<td>4</td>
</tr>
</tbody>
</table>

Social Justice and Diversity

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 476</td>
<td>Human Rights, Environment, and Development</td>
<td>4</td>
</tr>
</tbody>
</table>
Environmental Studies (CAS)

COMM 311  Intercultural and Intergroup Communication
COMM 371  Communication in Negotiation and Conflict Resolution
COMM 465  Communication and Social Identity
COMM 482  Voices of Dissent and Activism
CRPL 400  Introduction to Planning
GEOG 406  Spatial and Environmental Influences in Social Systems
POLS 362  Globalization, Human Rights and Diversity
PSYC 330  Psychology of Diversity
SOCI 180  Social Problems
SOCI 217  Sociology of Race and Ethnicity
SOCI 261  Conflict and Conflict Resolution

Data Analysis and Research Methods
COMM 201  Social Scientific Research Methods in Communication Studies
COMM 202  Rhetorical Research Methods in Communication Studies
CRPL 471  Environmental Impact Assessment
ECON 215  Statistics
POLS 286  Political Analysis
PSYC 350  Research Methods and Data Analysis
SOCI 205  Introduction to Social Research Methods
SOCI 206  Introduction to Social Statistics
STAT 218  Introduction to Statistics
STAT 380  Statistics and Applications

Credit Hours Subtotal:  21-22
Total Credit Hours  38-42

Biosphere and Earth Systems Studies Option
Human Dimensions Foundations
Select one course from each of the following areas:  9-10

Negotiation, Advocacy, and Discourse
Select one of the following:
COMM 209  Public Speaking
COMM 212  Debate
COMM 220  Public Advocacy and Civic Engagement
COMM 250  Rhetoric, Media, and Civic Life
COMM 312  Argumentation
COMM 355  Community and Identity in the Digital Age
COMM 375  Theories of Persuasion

Power, Politics, and Policy
Select one of the following:
POLS 100  Power and Politics in America
POLS 108  Political Ideas
POLS 221  Politics in State and Local Governments
POLS 334  Polls, Politics and Public Opinion
POLS 430  Political Communication
PHIL 225  Environmental Ethics
AECN 265  Resource and Environmental Economics I
AECN 357  Natural Resource and Environmental Law
AECN 456  Environmental Law
ALEC 410  Environmental Leadership
CRPL 470  Environmental Planning and Policy
ECON 200  Economic Essentials and Issues
ENSC 230  Energy and the Environment: Economics and Policy

Data Analysis and Research Methods
STAT 218  Introduction to Statistics
or STAT 380  Statistics and Applications

Required Option Courses  32-35
Life Science
LIFE 120  Fundamentals of Biology I  4
& LIFE 120L  and Fundamentals of Biology I laboratory
LIFE 121  Fundamentals of Biology II  4
& LIFE 121L  and Fundamentals of Biology II Laboratory

Chemistry
CHEM 109  General Chemistry I
or CHEM 110  Fundamental Chemistry I

Ecology
BIOS 207  Ecology and Evolution
or NRES 220  Principles of Ecology

Earth Systems
Select one of the following:
GEOL 101  Dynamic Earth
GEOL 106  Environmental Geology
GEOG 181  Quality of the Environment
ENSC 110  Energy in Perspective
NRES 108  Earth's Natural Resource Systems Laboratory

Climate
Select one of the following:
NRES 104  Climate in Crisis
METR 100  Weather and Climate
METR 180  Environment, Energy, and Climate Change
NRES 208  Applied Climate Sciences

Water
GEOG 281  Introduction to Water Science
or ENVR 109  Water in Society

Soil
SOIL 153  Soil Resources

Geospatial Science
GEOG 312 / NRES 312  Introduction to Spatial Sciences

Credit Hours Subtotal:  49-53

Advanced Option Sub-Area
Select at least 12 hours from one of the following sub-areas, 12
with at least 9 hours at the 300 or 400 level.

Earth Systems
GEOL 200  Mineralogy
GEOL 201  Igneous and Metamorphic Petrology
GEOL 308 / GEOG 308  Biogeography
GEOL 372  Water & Earth Connections
Environmental Studies (CAS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 410</td>
<td>Geochemistry</td>
</tr>
<tr>
<td>GEOL 423</td>
<td>Quaternary Paleoclimatology and Paleocoeology</td>
</tr>
<tr>
<td>GEOL 424</td>
<td>Biogeochemical Cycles</td>
</tr>
<tr>
<td>GEOL 488</td>
<td>Groundwater Geology</td>
</tr>
<tr>
<td>BIOS 454 / NRES 454</td>
<td>Ecological Interactions</td>
</tr>
<tr>
<td>BIOS 458 / NRES 458</td>
<td>Wetlands</td>
</tr>
</tbody>
</table>

**Climate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>METR 270</td>
<td>Introduction to Climatology</td>
</tr>
<tr>
<td>METR 370</td>
<td>Applied Climatology</td>
</tr>
<tr>
<td>METR 450</td>
<td>Climate and Society</td>
</tr>
<tr>
<td>METR 470</td>
<td>The Climate System: Analysis and Prediction</td>
</tr>
<tr>
<td>METR 478</td>
<td>Regional Climatology</td>
</tr>
</tbody>
</table>

**Ecology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 200</td>
<td>Landscape and Environmental Appreciation</td>
</tr>
<tr>
<td>BIOS 300</td>
<td>Toxins in the Environment</td>
</tr>
<tr>
<td>BIOS 337</td>
<td>Applications of Bioinformatics</td>
</tr>
<tr>
<td>BIOS 406</td>
<td>Insect Ecology</td>
</tr>
<tr>
<td>BIOS 416</td>
<td>Biodiversity Conservation</td>
</tr>
<tr>
<td>BIOS 444 / GEOL 444</td>
<td>Earth and Environmental Microbiology</td>
</tr>
<tr>
<td>BIOS 454 / NRES 454</td>
<td>Ecological Interactions</td>
</tr>
<tr>
<td>BIOS 457 / GEOL 457</td>
<td>Ecosystem Ecology</td>
</tr>
<tr>
<td>BIOS 458 / NRES 458</td>
<td>Wetlands</td>
</tr>
<tr>
<td>BIOS 459 / NRES 459</td>
<td>Limnology</td>
</tr>
<tr>
<td>BIOS 481 / NRES 481</td>
<td>Stream and River Ecology</td>
</tr>
</tbody>
</table>

**Geospatial Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 412 / NRES 412</td>
<td>Introduction to Geographic Information Systems</td>
</tr>
<tr>
<td>GEOG 418</td>
<td>Introduction to Remote Sensing</td>
</tr>
<tr>
<td>GEOG 419</td>
<td>Applications of Remote Sensing in Agriculture and Natural Resources</td>
</tr>
<tr>
<td>GEOG 420</td>
<td>Digital Image Analysis of Remote Sensing Data</td>
</tr>
<tr>
<td>GEOG 421</td>
<td>Field Techniques in Remote Sensing</td>
</tr>
<tr>
<td>GEOG 422</td>
<td>Advanced Techniques in Geographic Information Systems</td>
</tr>
<tr>
<td>GEOG 427 / NRES 427</td>
<td>Introduction to the Global Positioning System (GPS)</td>
</tr>
<tr>
<td>CRPL 430</td>
<td>Planning with GIS</td>
</tr>
<tr>
<td>CRPL 432</td>
<td>Advanced Spatial Analysis with GIS</td>
</tr>
<tr>
<td>CRPL 433</td>
<td>GIS in Environmental Design and Planning</td>
</tr>
<tr>
<td>NRES 312</td>
<td>Introduction to Spatial Sciences</td>
</tr>
</tbody>
</table>

**Additional Major Requirements**

**Credit Hours Subtotal:** 12
**Total Credit Hours:** 61-65

**Grade Rules**

**C- and D Grades**
A grade of C or higher is required in all major courses.

**Pass/No Pass**
No courses taken Pass/No Pass will count toward the major or minor.

**Requirements for Minor Offered by Department**

At least eighteen (18) hours, with 6 hours at the 300 level or above.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 101</td>
<td>Environmental Studies Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 201</td>
<td>Science, Systems, Environment and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 249</td>
<td>Individual and Cultural Perspectives on the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 319</td>
<td>Environmental Engagement and the Community</td>
<td>2</td>
</tr>
</tbody>
</table>

**Credit Hours Subtotal:** 9

**Earth and Environmental Systems**

Select one course from the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 207</td>
<td>Ecology and Evolution</td>
</tr>
<tr>
<td>ENSC 110</td>
<td>Energy in Perspective</td>
</tr>
<tr>
<td>ENVR 109</td>
<td>Water in Society</td>
</tr>
<tr>
<td>GEOG 155</td>
<td>Elements of Physical Geography</td>
</tr>
<tr>
<td>GEOG 181</td>
<td>Quality of the Environment</td>
</tr>
<tr>
<td>GEOG 281</td>
<td>Introduction to Water Science</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td>GEOL 106</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>METR 100</td>
<td>Weather and Climate</td>
</tr>
<tr>
<td>METR 180</td>
<td>Environment, Energy, and Climate Change</td>
</tr>
<tr>
<td>NRES 104</td>
<td>Climate in Crisis</td>
</tr>
<tr>
<td>NRES 108</td>
<td>Earth’s Natural Resource Systems Laboratory</td>
</tr>
<tr>
<td>NRES 208</td>
<td>Applied Climate Sciences</td>
</tr>
<tr>
<td>NRES 220</td>
<td>Principles of Ecology</td>
</tr>
<tr>
<td>SOIL 153</td>
<td>Soil Resources</td>
</tr>
</tbody>
</table>

**Credit Hours Subtotal:** 3-4

**Human Dimensions**

Select one course from the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 473</td>
<td>Ecological Anthropology</td>
</tr>
<tr>
<td>COMM 209</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>COMM 212</td>
<td>Debate</td>
</tr>
<tr>
<td>COMM 220</td>
<td>Public Advocacy and Civic Engagement</td>
</tr>
<tr>
<td>COMM 250</td>
<td>Rhetoric, Media, and Civic Life</td>
</tr>
<tr>
<td>COMM 271</td>
<td>Organizing Social Change</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Argumentation</td>
</tr>
<tr>
<td>COMM 355</td>
<td>Community and Identity in the Digital Age</td>
</tr>
<tr>
<td>COMM 375</td>
<td>Theories of Persuasion</td>
</tr>
</tbody>
</table>

**Credit Hours Subtotal:**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 283</td>
<td>Space, the Environment and You</td>
</tr>
<tr>
<td>GEOG 450</td>
<td>Climate and Society</td>
</tr>
<tr>
<td>NRES 315</td>
<td>Human Dimensions of Fish and Wildlife Management</td>
</tr>
<tr>
<td>POLS 250</td>
<td>Genetics, Brains, and Politics</td>
</tr>
<tr>
<td>PSYC 288</td>
<td>The Psychology of Social Behavior</td>
</tr>
<tr>
<td>PSYC 334</td>
<td>Psychology of Environmental Sustainability</td>
</tr>
</tbody>
</table>

**Credit Hours Subtotal:** 3

**Economics and Policy**

Select one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Max credits per semester</th>
<th>Max credits per degree</th>
<th>Grading Option</th>
<th>Offered</th>
<th>Prerequisite for</th>
</tr>
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<tbody>
<tr>
<td>POLS 100</td>
<td>Power and Politics in America</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>Graded with Option</td>
<td>FALL</td>
<td>SCIL 300</td>
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<tr>
<td>POLS 108</td>
<td>Political Ideas</td>
<td></td>
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<tr>
<td>POLS 221</td>
<td>Politics in State and Local Governments</td>
<td></td>
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<tr>
<td>POLS 332</td>
<td>Climate Change: Policy and Politics</td>
<td></td>
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<tr>
<td>POLS 334 / COMM 334</td>
<td>Polls, Politics and Public Opinion</td>
<td></td>
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<tr>
<td>POLS 430 / COMM 430</td>
<td>Political Communication</td>
<td></td>
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<tr>
<td>PHIL 225</td>
<td>Environmental Ethics</td>
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<tr>
<td>AECN 357</td>
<td>Natural Resource and Environmental Law</td>
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<tr>
<td>AECN 456</td>
<td>Environmental Law</td>
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<tr>
<td>ALEC 410</td>
<td>Environmental Leadership</td>
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<tr>
<td>CRPL 470</td>
<td>Environmental Planning and Policy</td>
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<tr>
<td>ECON 200</td>
<td>Economic Essentials and Issues</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ENSC 230</td>
<td>Energy and the Environment: Economics and Policy</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 323</td>
<td>Natural Resources Policy</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NRES 413</td>
<td>Environmental Leadership</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Credit Hours Subtotal:** 3

**Grade Rules**

**C- and D Grades**

A grade of C or higher is required in all minor courses.

**Pass/No Pass**

No courses taken Pass/No Pass will count toward the major or minor.

**ENVR 101 Environmental Studies Orientation**

*Description:* A comprehensive overview of the discipline of Environmental Studies. Investigate current and critical environmental issues.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Grading Option:** Graded with Option

**ENVR 109 Water in Society**

*Crosslisted with:* SCIL 109, AECN 109, NRES 109, GEOG 109

*Description:* Introduction to the scientific, social, and economic dimensions of historical and contemporary water systems. Students will develop an understanding of hydrologic systems and analyze and engage in decision-making about complex challenges associated with water resource use.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded with Option

**ENVR 189H University Honors Seminar**

*Prerequisites:* Good standing in the University Honors Program or by invitation.

*Notes:* A University Honors Seminar 189H course is required of all students in the University Honors Program. Letter Grade Only.

**Description:** Topics vary.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

**ACE:** ACE 8 Civic/Ethics/Stewardship

**ENVR 201 Science, Systems, Environment and Sustainability**

*Description:* Application of basic Earth system and ecosystem science concepts for understanding: natural systems; the relationships and interactions between the living and the non-living environment; current and future environmental challenges; the importance of considering scientific evidence and uncertainty; and the implementation of the sustainability concepts.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

**ACE:** ACE 8 Civic/Ethics/Stewardship

**ENVR 249 Individual and Cultural Perspectives on the Environment**

*Crosslisted with:* NRES 249

*Description:* The influence of culture on individual perspectives related to the concepts of sustainability and the relationship that humans have with the environment. The role of ethics, religion, and historical setting on the individual and cultural perspectives related to environmental challenges at the local to global scales.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded with Option

**ACE:** ACE 9 Global/Diversity

**ENVR 319 Environmental Engagement and the Community**

*Description:* The processes of environmental agencies and organizations use to develop and implement projects and programs. The development of their project proposal, work plans, budgets, and final report. Requires developing and implementing projects and programs in collaboration with clients who are from agencies and organizations working with environmental issues.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Grading Option:** Graded with Option
ENVR 334 Psychology of Environmental Sustainability
Crosslisted with: PSYC 334
Description: Applications of psychological principles to understand human transactions with their environments and find behavior-based solutions to environmental problems.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option
ACE: ACE 8 Civic/Ethics/Stewardship
ENVR 387 The Environment and the French-Speaking World
Crosslisted with: FREN 387, ENGL 387, GLST 387
Description: An examination of environmental engagement in the novels, short stories, poetry, films, and music of the French-speaking world.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option
Groups: Literary and Cultural Studies
ENVR 434 Environmental Education and Interpretation
Crosslisted with: NRES 434, NRES 834
Notes: Requires 20 hours of service.
Description: Examination of formal and informal environmental education and interpretation. Knowledge, application and practice relevant to science teachers and park, extension, museums, and zoo educators.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option
Groups: Literary and Cultural Studies
ENVR 491 Environmental Studies Seminar
Prerequisites: Permission
Notes: Majors must have passed ENVR 101.
Description: Topic varies.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option
Offered: SPRING
ENVR 495 Internship in Environmental Studies
Prerequisites: Permission.
Description: Experience in off-campus setting that is directly relevant to environmental studies.
Credit Hours: 1-4
Min credits per semester: 1
Max credits per semester: 4
Max credits per degree: 12
Grading Option: Graded with Option
ENVR 496 Independent Study
Prerequisites: Permission.
Credit Hours: 1-4
Min credits per semester: 1
Max credits per semester: 4
Max credits per degree: 12
Grading Option: Graded with Option

ENVR 499A Environmental Studies Senior Thesis I
Prerequisites: Junior standing; environmental studies major or minor; prior arrangement with program director and emphasis adviser or academic adviser
Notes: First course of a two-semester sequence of courses consisting of ENVR 499A and 499B. Letter Grade only.
Description: Preparation for writing the senior thesis
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Grading Option: Graded
Prerequisite for: ENVR 499B
ACE: ACE 10 Integrated Product
ENVR 499B Environmental Studies Senior Thesis II
Prerequisites: ENVR 499A
Notes: Second course of a two-semester sequence of courses consisting of ENVR 499A and 499B. The thesis is to be written under the supervision of the emphasis adviser or a faculty member designated by the adviser. A committee of two (the faculty member guiding the thesis and an additional member with expertise in the topic) will review the thesis.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Grading Option: Graded with Option
ACE: ACE 10 Integrated Product
ENVR 499H Honors: Environmental Studies Senior Thesis I & II
Prerequisites: Permission.
Description: Preparation for writing the senior thesis.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option
ACE: ACE 10 Integrated Product

PLEASE NOTE
This document represents a sample 4-year plan for degree completion with this major. Actual course selection and sequence may vary and should be discussed individually with your college or department academic advisor. Advisors also can help you plan other experiences to enrich your undergraduate education such as internships, education abroad, undergraduate research, learning communities, and service learning and community-based learning.

Environmental Studies (B.A.)
Environmental Studies (B.S.)
Career Information
The following represents a sample of the internships, jobs and graduate school programs that current students and recent graduates have reported.

Transferable Skills
- Confidently navigate complex, ambiguous projects and environments
- Conduct and present research to large and small groups
- Integrate information and perspectives from multiple disciplines to solve problems
- Collaborate with a team to develop solutions
- Communicate clearly using different forms of writing to and for a variety of different audiences
- Comprehend and critically evaluate complex information
• Understand and use proper laboratory and technical skills and instruments
• Offer empathetic, sensitive, and patient interactions with others
• Understand and utilize a variety of research methodologies

Jobs of Recent Graduates
• Environmental Scientist, Olsson & Associates Engineering - Lincoln NE
• Water Quality Coordinator, City of Minneapolis - Minneapolis MN
• Wildland Firefighter, United States Forest Service - Kalispell MT
• VISTA Leader, AmeriCorps - Beckley WV
• Plant Ecologist, Prairie Legacy Inc. - Lincoln NE
• Operations Assistant, Yellowstone National Park - WY
• Sustainability Associate, Cleaner Greener Lincoln - Lincoln NE
• National Drought Mitigation Center, University of Nebraska-Lincoln - Lincoln NE
• Field Technician, Fish & Wildlife COOP - Lincoln NE
• Crew Member, Montana Conservation Corps - Kalispel MT
• Junior Consultant, NAQS Environmental Experts - Lincoln NE
• Land Steward, Nature Conservancy - AZ
• Corps Member, FEMA Corps - Baltimore MD
• Extension Field Technologist, University of Nebraska-Lincoln - Lincoln NE
• Wildlife Technician, Northern Arizona University - Vallejo CA

Internships
• Integrated Water Management Planner Assistant, Nebraska Dept of Natural Resources - Lincoln NE
• Biological Technician, USDA-AMRU - Lincoln NE
• Natural Resource Intern, JEO Consulting - Lincoln NE
• Pathways Intern, USDA Natural Resources Conservation Service - Lincoln NE
• Integrated Management Technical Assistant, NE Dept of Natural Resources - Lincoln NE
• Environmental Health Waste Section Intern, Lincoln-Lancaster County Health Dept - Lincoln NE
• Intern, Olsson Associates - La Vista NE
• Crime Analysis, Lincoln Police Department - Lincoln NE
• Project Manager Assistant Intern, LI-COR Biosciences - Lincoln NE
• Waste Section Intern, Lancaster County Health Department - Lincoln NE
• Integrated Water Management Planner Assistant, Nebraska Department of Natural Resources - Lincoln NE
• Biological Technician, USDA-AMRU - Lincoln NE
• Natural Resource Intern, JEO Consulting - Lincoln NE
• Pathways Intern, USDA - Natural Resource Conservation Services - Lincoln NE
• Permaculture Intern, Big Island Farms - Honokaa HI

Graduate & Professional Schools
• Master’s Degree, Environmental Science and Policy, Indiana University - Bloomington IN
• Master’s Degree, Energy, Technology, & Policy, Humbolt State University - Arcata CA
• Master’s Degree, Environmental Policy, University of Michigan - Ann Arbor MI
• Master’s Degree, Geography, University of Nebraska-Lincoln - Lincoln NE
• Master’s Degree, Public Health, University of Nebraska Medical Center - Omaha NE
• Master’s Degree, Water Biogeochemistry, University of Nebraska-Lincoln - Lincoln NE