

# ENVIRONMENTAL & SUSTAINABILITY STUDIES (CASNR)

## Description

**Website:** esp.unl.edu (<http://esp.unl.edu/>)

The environmental and sustainability studies major is designed for students who want to make a difference and contribute to solving environmental challenges on a local to global scale. Environmental and sustainability studies is focused on solutions. 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 and sustainability studies major provides the knowledge and skills needed for students to work across disciplines and to be competitive in the job market. The environmental and sustainability 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.

Students may choose to minor in environmental studies or minor in sustainability studies as alternatives to pursuing their interests in environment and sustainability.

## Options

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.

### Environmental Studies Standard Option

To provide depth within a particular discipline within the College of Agricultural Sciences and Natural (CASNR) resources, the standard option is to choose a minor from a disciplinary area within CASNR.

Students will select one course from the Policy area and one course from the Law area, with at least 3 credits at the 300 or 400 level.

### Natural Resources Option

This option provides disciplinary knowledge and proficiency in the collection, synthesis, and interpretation of information/data in the disciplines represented in the School of Natural Resources **courses (NRES, WATS, SOIL, RNGE). Three of the courses need to be at the 300 level or above.** Students will select one course from the Policy area and one course from the Law area, with at least 3 credits at the 300 or 400 level.

## Collaborative Programs

Choose from one of two collaborative programs – Public Health and Pre-Law. These course sequences are designed for students interested in pursuing post-undergraduate degrees. Select in consultation with an academic advisor.

## Accelerated Program

Students may complete the Community and Regional Planning Accelerated Program. The course sequence is designed for students

interested in pursuing a post-undergraduate degree. Select in consultation with an academic advisor.

## College Requirements

### College Admission

Requirements for admission into the College of Agricultural Sciences and Natural Resources (CASNR) are consistent with general University admission requirements (one unit equals one high school year): 4 units of English, 4 units of mathematics, 3 units of natural sciences, 3 units of social sciences, and 2 units of world language. Students must also meet performance requirements: a 3.0 cumulative high school grade point average OR an ACT composite of 20 or higher, writing portion not required OR a score of 1040 or higher on the SAT Critical Reading and Math sections OR rank in the top one-half of graduating class; transfer students must have a 2.0 (on a 4.0 scale) cumulative grade point average and 2.0 on the most recent term of attendance.

### Admission Deficiencies/Removal of Deficiencies

Students who are admitted to CASNR with core course deficiencies must remove these deficiencies within the first 30 credit hours at the University of Nebraska–Lincoln, or within the first calendar year at Nebraska, whichever takes longer, excluding foreign languages. Students have up to 60 credit hours to remove world language deficiencies. College-level coursework taken to remove deficiencies may be used to meet degree requirements in CASNR.

Deficiencies in the required entrance subjects can be removed by the completion of specified courses in the University or by correspondence.

The Office of Admissions, Alexander Building (south entrance), City Campus, provides information to new students on how deficiencies can be removed.

## College Degree Requirements

### Curriculum Requirements

The curriculum requirements of the College consist of three areas: ACE (Achievement-Centered Education), College of Agricultural Sciences and Natural Resources Core, and Degree Program requirements and electives. All three areas of the College Curriculum Requirements are incorporated within the description of the Major/Degree Program sections of the catalog. The individual major/degree program listings of classes ensures that a student will meet the minimum curriculum requirements of the College.

### World Languages/Language Requirement

Two units of a world language are required. This requirement is usually met with two years of high school language.

### Experiential Learning

All undergraduates in the College of Agricultural Sciences and Natural Resources must take an Experiential Learning (EL) designated course. This may include 0-credit courses designed to document co-curricular activities recognized as Experiential Learning.

### Minimum Hours Required for Graduation

The College grants the bachelors degree in programs associated with agricultural sciences, natural resources, and related programs. Students working toward a degree must earn at least 120 semester hours of credit. A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point

average required for graduation. Please check the degree program on its graduation cumulative grade point average.

## Grade Rules

### Removal of C-, D, and F Grades

Only the most recent letter grade received in a given course will be used in computing a student's cumulative grade point average if the student has completed the course more than once and previously received a grade or grades below C in that course.

The previous grade (or grades) will not be used in the computation of the cumulative grade point average, but it will remain a part of the academic record and will appear on any transcript.

A student can remove from his/her cumulative average a course grade of C-, D+, D, D-, or F if the student repeats the same course at the University of Nebraska and receives a grade other than P (pass), I (incomplete), N (no pass), W (withdrew), or NR (no report). If a course is no longer being offered, it is not eligible for the revised grade point average computation process.

For complete procedures and regulations, see the Office of the University Registrar website at <http://www.unl.edu/regrec/course-repeats> (<http://www.unl.edu/regrec/course-repeats/>).

### Pass/No Pass

Students in CASNR may take any course offered on a Pass/No Pass basis within the 24-hour limitation established by the Faculty Senate. However, a department may specify that the Pass/No Pass status of its courses be limited to non-majors or may choose to offer some courses for letter grades only.

### GPA Requirements

A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point average required for graduation. Please check the degree program on its graduation cumulative grade point average.

## Transfer Credit Rules

To be considered for admission a transfer student, Nebraska resident or nonresident, must have an accumulated average of C (2.0 on a 4.0 scale) and a minimum C average in the last semester of attendance at another college. Transfer students who have completed less than 12 credit hours of college study must submit either ACT or SAT scores.

Ordinarily, credits earned at an accredited college are accepted by the University. The College, however, will evaluate all hours submitted on an application for transfer and reserves the right to accept or reject any of them. Sixty (60) is the maximum number of hours the University will accept on transfer from a two-year college. Ninety (90) is the maximum number of hours the University will accept from a four-year college. Transfer credit in the degree program must be approved by the degree program advisor on a Request for Substitution Form to meet specific course requirements, group requirements, or course level requirements in the major. At least 9 hours in the major field, including the capstone course, must be completed at the University of Nebraska–Lincoln regardless of the number of hours transferred.

The College will accept no more than 10 semester hours of C-, D+, D, and D- grades from other schools. The C-, D+, D, and D- grades can only be applied to free electives. This policy does not apply to the transfer of grades from UNO or UNK to the University of Nebraska–Lincoln.

## Joint Academic Transfer Programs

The College of Agricultural Sciences and Natural Resources has agreements with many institutions to support joint academic programs. The transfer programs include dual degree programs and cooperative degree programs. Dual degree programs offer students the opportunity to receive a degree from a participating institution and also to complete the requirements for a bachelor of science degree in CASNR. Cooperative programs result in a single degree from either the University of Nebraska–Lincoln or the cooperating institution.

## Dual Degree Programs

### A to B Programs

The A to B Program, a joint academic program offered by the CASNR and participating community colleges, allows students to complete the first two years of a degree program at the participating community college and continue their education and study in a degree program leading toward a bachelor of science degree.

The A to B Program provides a basic knowledge plus specialized coursework. Students transfer into CASNR with junior standing.

Depending on the community college, students enrolled in the A to B Program may complete the requirements for an associate of science at the community college, transfer to the University of Nebraska–Lincoln, and work toward a bachelor of science degree.

Participating community colleges include:

- Central Community College
- Metropolitan Community College
- Mid-Plains Community College
- Nebraska College of Technical Agriculture
- Nebraska Indian Community College
- Northeast Community College
- Southeast Community College
- Western Nebraska Community College

### 3+2 Programs

Two specialized degree programs in **animal science** and **veterinary science** are offered jointly with an accredited college or school of veterinary medicine. These two programs permit CASNR animal science or veterinary science students to receive a bachelor of science degree from the University of Nebraska–Lincoln with a degree in animal science or veterinary science after successfully completing two years of the professional curriculum in veterinary medicine at an accredited veterinary school. Students who successfully complete the 3+2 Program, must provide transcripts and complete the Application for Degree form via MyRED. Students without MyRED access may apply for graduation in person at Husker Hub in the Canfield Administration Building, or by mail. Students should discuss these degree programs with their academic advisor.

### Cooperative Degree Programs

Academic credit from the University and a cooperating institution are applied towards a four-year degree from either the University of Nebraska–Lincoln (University degree-granting program) or the cooperating institution (non-University degree-granting program). All have approved programs of study.

### UNL Degree-Granting Programs

A University of Nebraska–Lincoln degree-granting program is designed to provide students the opportunity to complete a two-year program of

study at one of the four-year institutions listed below, transfer to CASNR, and complete the requirements for a bachelor of science degree.

**Chadron State College.** Chadron State College offers a 2+2 program leading to a grassland ecology and management degree program and a transfer program leading to a bachelor of science in agricultural education in the teaching option.

**Wayne State College.** Wayne State College offers a 3+1 program leading to a bachelor of science in plant biology in the ecology and management option and a 3+1 program leading to a bachelor of science in Applied Science.

**University of Nebraska at Kearney.** Transfer programs are available for students pursuing degree programs leading to a bachelor of science degree.

**University of Nebraska at Omaha.** Transfer programs are available for students pursuing degree programs leading to a bachelor of science degree.

### Non University of Nebraska–Lincoln Degree-Granting Programs

CASNR cooperates with other institutions to provide coursework that is applied towards a degree at the cooperating institution. Pre-professional programs offered by CASNR allow students to complete the first two or three years of a degree program at the University prior to transferring and completing a degree at the cooperating institution.

**Chadron State College–Range Science.** The 3+1 Program in range science allows Chadron State College students to pursue a range science degree through Chadron State College. Students complete three years of coursework at Chadron State College and one year of specialized range science coursework (32 credit hours) at CASNR.

**Dordt College (Iowa)–Agricultural Education: Teaching Option.** This program allows students to pursue an Agricultural Education Teaching Option degree leading toward a bachelor of science in agricultural education. Students at Dordt College will complete 90 credit hours in the Agricultural Education: Teaching Option Transfer Program.

### Residency

Students must complete at least 30 of the total hours for their degree using University of Nebraska–Lincoln credits. At least 18 of the 30 credit hours must be in courses offered through CASNR<sup>1</sup> (>299) including the appropriate ACE 10 degree requirement or an approved ACE 10 substitution offered through another Nebraska college and excluding independent study regardless of the number of hours transferred. Credit earned during education abroad may be used toward the residency requirement if students register through the University of Nebraska–Lincoln and participate in prior-approved education abroad programs. The University of Nebraska–Lincoln open enrollment and summer independent study courses count toward residence.

<sup>1</sup> Includes courses taught by CASNR faculty through interdisciplinary prefixes (e.g., LIFE, MBIO, ENVR, SCIL, EAEP, HRTM, ENSC) and CASNR crosslisted courses taught by non-CASNR faculty.

### Online and Distance Education

There are many opportunities to earn college credit online through the University of Nebraska–Lincoln. Some of these credits may be applicable not only as elective credits but also toward the fulfillment of the College's education requirements. Credits earned online may count

toward residency. However, certain offerings may not be counted toward scholarship requirements or academic recognition criteria.

### For further information, contact:

Office of Online and Distance Education  
University of Nebraska–Lincoln  
305 Brace Labs  
Lincoln, NE 68588-0109  
402-472-4681  
<http://online.unl.edu/>

### Independent Study Rules

Students wishing to take part in independent studies must obtain permission; complete and sign a contract form; and furnish copies of the contract to the instructor, advisor, departmental office, and the Dean's Office. The contract should be completed before registration. Forms are available in 103 Agricultural Hall or online at the CASNR website.

Independent study projects include research, literature review or extension of coursework under the supervision and evaluation of a departmental faculty member.

Students may only count 12 hours of independent study toward their degrees and no more than 6 hours can be counted during their last 36 hours earned, excluding senior thesis, internships, and courses taught under an independent study number.

### Other College Degree Requirements

#### Capstone Course Requirement

A capstone course is required for each CASNR degree program. A capstone course is defined as a course in which students are required to integrate diverse bodies of knowledge to solve a problem or formulate a policy of societal importance.

### ACE Requirements

All students must fulfill the Achievement Centered Education (ACE) requirements. Information about the ACE program may be viewed at [ace.unl.edu](http://ace.unl.edu) (<https://ace.unl.edu/>).

The minimum requirements of CASNR reflect the common core of courses that apply to students pursuing degrees in the college. Students should work with an advisor to satisfy ACE outcomes 1, 2, 3, 4, 6, and 10 with the college requirements.

### Catalog Rule

Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted to the University of Nebraska–Lincoln or when they were first admitted to a Joint Academic Transfer Program. Students transferring from a community college, but without admission to a Joint Academic Transfer Program, may be eligible to fulfill the requirements as stated in the catalog for an academic year in which they were enrolled at the community college prior to attending the University of Nebraska–Lincoln. This decision should be made in consultation with academic advisors, provided the student a) was enrolled in a community college during the catalog year they are utilizing, b) maintained continuous enrollment at the previous institution for 1 academic year or more, and c) continued enrollment at the University of Nebraska–Lincoln within 1 calendar year from their last term at the previous institution. 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 the University of Nebraska–Lincoln in the College of Agricultural

Sciences and Natural Resources. Students must complete all degree requirements from a single catalog year. 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 and sustainability 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. 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.
4. Demonstrate the ability to critically assess environmental and sustainability issues from the local to global scale considering a range of perspectives.
5. Identify, explain, and evaluate problems/questions/issues using relevant data, resources and reasoning to form carefully considered conclusions.
6. 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.
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 so they can effectively operate in society and the professional world.

## Major Requirements

### College Core Requirements

#### College Integrative Course

SCIL 101	Science and Decision-Making for a Complex World	3
----------	---	---

#### Communications

Select one Written Communication (ACE 1) course of the following: 3

ENGL 150	Writing and Inquiry	
ENGL 151	Writing and Argument	
ENGL 254	Writing and Communities	
JGEN 120	Basic Business Communication	
JGEN 200	Technical Communication I	

Select one Oral Communication (ACE 2) course of the following: 3

ALEC 102	Interpersonal Skills for Leadership	
COMM 209	Public Speaking	
COMM 286	Business and Professional Communication	
NRES 301	Environmental Communication Skills	

Select one Communication and Interpersonal Skills elective of the following: 3

Any ACE 1 course (UNL approved list)

Any ACE 2 course (UNL approved list)		
ALEC 202	Foundations of Leadership Theory and Practice	
<i>Economics (ACE 6)</i>		
Select one of the following:		3
AECN 141	Introduction to the Economics of Agriculture	
ECON 200	Economic Essentials and Issues	
ECON 211	Principles of Macroeconomics	
ECON 212	Principles of Microeconomics	
<i>Humanities &amp; Social Science</i>		
Select one ACE 5 Humanities		3
Select one ACE 7 Arts		3
Credit Hours Subtotal:		21
<b>Total Credit Hours</b>		<b>21</b>

## Specific Major Requirements

### Environmental Studies and Sustainability Core

ENVR 101	Environmental Studies Orientation	1
ENVR 201	Science, Systems, Environment and Sustainability (ACE 8)	3
ENVR 249 / NRES 249	Individual and Cultural Perspectives on the Environment (ACE 9)	3
ENVR 319	Environmental Engagement and the Community	2
ENVR 334 / PSYC 334	Psychology of Environmental Sustainability	3
ENVR 489	Environmental Studies Senior Thesis I <sup>1</sup>	1
	or ENVR 489H Honors: Environmental Studies Senior Thesis I	
ENVR 499	Environmental Studies Senior Thesis II <sup>1</sup>	2
	or ENVR 499H Honors: Environmental Studies Senior Thesis II	
ENVR 495	Internship in Environmental Studies	1
Credit Hours Subtotal:		16

### Earth and Environmental Systems

<i>Ecology</i>		
Select one of the following:		3-4
BIOS 207	Ecology and Evolution	
NRES 220 & NRES 222	Principles of Ecology and Ecology Laboratory (Recommended)	
<i>Soil</i>		
SOIL 153 / PLAS 153	Soil Resources	4
<i>Climate</i>		
Select one of the following:		3-4
METR 100	Weather and Climate	
METR 180	Climate Change, Energy, and the Environment	
NRES 104	Climate in Crisis	
NRES 208	Climate Literacy in Natural Resources	
<i>Earth Systems</i>		
Select one of the following:		3-4
ENSC 110	Energy in Perspective	
GEOL 101	Dynamic Earth	
GEOL 106	Environmental Geology	

GEOL 109	Oceanography
GEOL 120	Geology of National Parks and Monuments
GEOL 125	Frontiers in Antarctic Geosciences
GEOG 155	Elements of Physical Geography
GEOG 181	Global Environmental Issues
NRES 108	Earth's Natural Resource Systems Laboratory

*Water*

Select one of the following:	3
ENVR 189H	University Honors Seminar
SCIL 109 / AECN 109 / ENVR 109 / GEOG 109 / NRES 109	Water in Society
WATS 281 / GEOG 281 / NRES 281	Introduction to Water Science

*Geospatial Science*

Select one of the following:	3-4
GEOG 217	Principles of GIS
NRES 218	Introduction to Geospatial Technologies
CRPL 433	GIS in Environmental Design and Planning

Credit Hours Subtotal: 23

**Human Behavior, Leadership and Change**

Select three courses. One course from each of the two following areas, with at least 6 hours at the 300 or 400 level. 9

*Human Behavior*

ANTH 130	Anthropology of the Great Plains
ANTH 170 / GEOG 170 / GPSP 170 / NRES 170 / SOCI 170	Introduction to Great Plains Studies
ANTH 473	Ecological Anthropology
ANTH 476	Human Rights, Environment, and Development
ENSC 230	Energy and the Environment: Economics and Policy
ENVR 189H	University Honors Seminar
FREN 387 / ENGL 387 / GLST 387	The Environment and the French-Speaking World
NRES 315	Human Dimensions of Fish and Wildlife Management
NRES 409	Human Dimensions of Natural Resources
GEOG 181	Global Environmental Issues
GEOG 334	Historical Geography of the Great Plains
GEOG 406	Spatial and Environmental Influences in Social Systems
PHIL 225	Environmental Ethics
SOCI 346	Environmental Sociology

*Leadership and Change*

AECN 256	Legal Aspects in Agriculture
----------	------------------------------

ALEC 202	Foundations of Leadership Theory and Practice
ALEC 388 / AECN 388	Ethics in Agriculture and Natural Resources
ALEC 393	Digital Imaging and Storytelling in Agriculture and Natural Resources
ALEC 410 / NRES 413	Environmental Leadership
COMM 271	Organizing Social Change
COMM 283	Interpersonal Communication
COMM 371	Communication in Negotiation and Conflict Resolution
ENVR 434	Environmental Education and Interpretation
NRES 301	Environmental Communication Skills

Credit Hours Subtotal: 9

**Ancillary Courses <sup>2</sup>**

*Mathematics*

MATH 102	Trigonometry (or higher)	3-5
----------	--------------------------	-----

*Statistics*

STAT 218	Introduction to Statistics (or equivalent (ACE 3))	3
----------	--	---

*Biological Sciences*

Select one sequence from the following: 4

BIOS 101 & BIOS 101L	General Biology and General Biology Laboratory
PLAS 131 & PLAS 132	Plant Science and Agronomic Plant Science Laboratory
or PLAS 131	Plant Science and Horticultural Plant Science Laboratory
& PLAS 133	
or PLAS 131	Plant Science and Plant Sciences Laboratory
& PLAS 134	

LIFE 120 & LIFE 120L	Fundamentals of Biology I and Fundamentals of Biology I laboratory
LIFE 121 & LIFE 121L	Fundamentals of Biology II and Fundamentals of Biology II Laboratory

*Chemistry*

Select one sequence from the following: 4

CHEM 105A & CHEM 105L	Chemistry in Context I and Chemistry in Context I Laboratory
CHEM 109A & CHEM 109L	General Chemistry I and General Chemistry I Laboratory
CHEM 113A & CHEM 113L	Fundamental Chemistry I and Fundamental Chemistry I Laboratory

*Physics*

Select one of the following: 3-5

PHYS 115	Descriptive Physics
PHYS 141	Elementary General Physics I
PHYS 151	Elements of Physics
AGST 109	Physical Principles in Agriculture and Life Sciences

**College Core Requirements 18**

**Program Option Area 30**

Credit Hours Subtotal:	69
<b>Total Credit Hours</b>	<b>117</b>

<sup>1</sup> ENVR 489 & ENVR 499 are the capstone courses for environmental and sustainability studies majors and both must be completed to fulfill the ACE 10 requirement.

ENVR 489H & ENVR 499H are the capstone courses for Honor students and both must be completed to fulfill the ACE 10 requirement.

<sup>2</sup> For students in pre-professional tracks or considering graduate studies, MATH 104 or MATH 106, CHEM 109A/CHEM 109L & CHEM 110A/CHEM 110L, PHYS 141, and LIFE 120/LIFE 120L plus LIFE 121/LIFE 121L are the recommended courses.

## Environmental and Sustainability Studies Options

### Environmental Studies Standard Option

The standard option is to choose a minor from a disciplinary area within CASNR. Students will select one course from the Policy area and one course from the Law area, with at least 3 credits at the 300 or 400 level.

#### Policy and Law

##### Policy

Select one from the following: 3

AECN 345	Policy Issues in Agriculture and Natural Resources
CRPL 470	Environmental Planning and Policy
CRPL 472	Hazard Mitigation Planning
ENSC 230	Energy and the Environment: Economics and Policy
NRES 323	Natural Resources Policy
NRES 475 / AGST 475 / CIVE 475 / CRPL 475 / GEOL 475 / PLAS 475 / POLS 475 / SOIL 475 / WATS 475	Water Quality Strategy
POLS 235	Public Policy: Concepts and Processes
POLS 236	Public Policy Analysis: Methods and Models
POLS 332	Climate Change: Policy and Politics

##### Law

Select one course from the following: 3

AECN 357 / NREE 357	Natural Resource and Environmental Law
AECN 456 / NREE 456	Environmental Law
AECN 457 / NREE 457 / WATS 457	Water Law

**Free electives** 6-12

Choose a CASNR Minor or second major. Select in consultation with your academic advisor. 12-18

Credit Hours Subtotal: 30

**Total Credit Hours** 30

### Natural Resources Option

The Natural Resources option provides disciplinary knowledge and proficiency in the collection, synthesis, and interpretation of information/data in the disciplines represented in the School of Natural Resources courses (NRES, WATS, SOIL, RNGE). **Three of the courses need to be at the 300 level or above.** Students will select one course from the Policy area and one course from the Law area, with at least 3 credits at the 300 or 400 level.

#### Policy and Law

##### Policy

Select one from the following: 3

AECN 345	Policy Issues in Agriculture and Natural Resources
CRPL 470	Environmental Planning and Policy
CRPL 472	Hazard Mitigation Planning
ENSC 230	Energy and the Environment: Economics and Policy
NRES 323	Natural Resources Policy
NRES 475 / AGST 475 / CIVE 475 / CRPL 475 / GEOL 475 / PLAS 475 / POLS 475 / SOIL 475 / WATS 475	Water Quality Strategy
POLS 235	Public Policy: Concepts and Processes
POLS 236	Public Policy Analysis: Methods and Models
POLS 332	Climate Change: Policy and Politics

##### Law

Select one from the following: 3

AECN 357 / NREE 357	Natural Resource and Environmental Law
AECN 456 / NREE 456	Environmental Law
AECN 457 / NREE 457 / WATS 457	Water Law

**Free electives** 6-12

**Natural Resources Courses: Six courses and a minimum of 18 hours of coursework in natural resources courses (NRES, WATS, SOIL, RNGE). Three of the courses need to be at the 300 level or above.**

Credit Hours Subtotal: 30

**Total Credit Hours** 30

### Collaborative Programs

Choose from one of two collaborative programs – Public Health and Pre-Law. These course sequences are designed for students interested in pursuing post-undergraduate degrees. Select in consultation with an academic advisor.

**Public Health – Collaborative Program with University of Nebraska Medical Center** 18

CPH 500 Foundations of Public Health

CPH 501 Human Health Behavior	
CPH 502 Health Services Administration	
CHP 503 Public Health, Environment and Safety	
CHP 504 Epidemiology in Public Health	
CHP 506 Biostatistics I (Will generally substitute for STAT 218 or equivalent)	
<b>Free Electives</b>	<b>12</b>
<b>Total Credit Hours</b>	<b>30</b>

**Pre-Law (Year 4) - Nebraska College of Law**

An applicant will be accepted into the 3-3 Program at the College of Law if the applicant:

1. Has an LSAT score of at least 156;
2. Has a cumulative undergraduate GPA of 3 .6 or higher as calculated by the Law School Admission Council;
3. Will have successfully completed at least 75% of the course credits required for his or her undergraduate degree, along with all other requirements of his or her undergraduate degree program, by the date of matriculation at the College of Law. Course credits may include no more than 6 credit hours of Pass/No Pass coursework;
4. Has submitted on time the materials required of all applicants to the College of Law, including a completed application, satisfactory letters of recommendation, a personal statement, and records of the required course credits;
5. Has not been on academic probation at any undergraduate institution;
6. Has provided the College of Law with a letter from the relevant Dean, or other administrator of equivalent authority, of the applicant's undergraduate institution stating that the applicant has completed all institutional requirements for participation in the 3-3 Law College Program and that the institution will grant the applicant an undergraduate degree upon the applicant's successful completion of the first year College of Law coursework.

If the above requirements are satisfied, the applicant will automatically be accepted into the 3-3 Law Program unless there is information concerning the applicant that reflects adversely on the applicant's character and fitness, including criminal citations, pending criminal charges, or criminal convictions. In such cases, the application will be individually reviewed by the College of Law Admissions Committee.

**Year 1 College of Law**

Select 30 credits from the following list of courses:	<b>30</b>
LAW 501 Contracts I or LAW 501GContracts I	
LAW 503 Torts I	
LAW 505 Property I or LAW 505GProperty I	
LAW 508 Criminal Law or LAW 508CCriminal Law	
LAW 513 Legal Analysis, Writing and Research & LAW 514 (LAWR) and Legal Analysis, Writing and Research (LAWR)	

LAW 513G & LAW 514G	Legal Analysis, Writing and Research (LAWR) and Legal Analysis, Writing and Research (LAWR)	
LAW 516 or LAW 516G	Civil Procedure I	
LAW 518 / LAW 518G	International Perspectives in U.S. Legal System: Practicing Law in a Global Legal Environment	
Credit Hours Subtotal:		<b>30</b>

**Additional Major Requirements**

**Grade Rules**

**C- and D Grades**

Environmental and sustainability studies majors must earn a grade of C or above is required for all courses in the major, including those in the major Core; Human Behavior, Leadership, and Change requirements; and Option requirements. Ancillary courses are excluded from this requirement.

**Pass/No Pass**

No course taken Pass/No Pass will be counted toward the major (excluding ancillary courses) unless offered exclusively with a grade option of Pass/No Pass. This includes courses in the major Core; Human Behavior, Leadership, and Change requirements; and Option requirements.

**Requirements for Minor Offered by Department**

**Environmental Studies Minor**

Minimum of 18 hours with 6 hours at 300 level or above are required.

**Required Environmental Studies Courses**

ENVR 101	Environmental Studies Orientation	<b>1</b>
ENVR 201	Science, Systems, Environment and Sustainability	<b>3</b>
ENVR 249	Individual and Cultural Perspectives on the Environment	<b>3</b>
ENVR 319	Environmental Engagement and the Community	<b>2</b>
Credit Hours Subtotal:		<b>9</b>

**Earth and Environmental Systems**

Select one of the following:	<b>3-4</b>	
BIOS 207	Ecology and Evolution	
CRPL 433	GIS in Environmental Design and Planning	
ENSC 110	Energy in Perspective	
GEOG 155	Elements of Physical Geography	
GEOG 181	Global Environmental Issues	
GEOG 217	Principles of GIS	
GEOL 101	Dynamic Earth	
GEOL 106	Environmental Geology	
GEOL 109	Oceanography	
GEOL 120	Geology of National Parks and Monuments	
GEOL 125	Frontiers in Antarctic Geosciences	
METR 100	Weather and Climate	

METR 180	Climate Change, Energy, and the Environment	ANTH 473	Ecological Anthropology
NRES 104	Climate in Crisis	ANTH 476	Human Rights, Environment, and Development
NRES 108	Earth's Natural Resource Systems Laboratory	BLAW 300	Business, Government & Society
NRES 208	Climate Literacy in Natural Resources	COMM 101	Communication in the 21st Century
NRES 220 & NRES 222	Principles of Ecology and Ecology Laboratory (Recommended)	COMM 210	Communicating in Small Groups
NRES 218	Introduction to Geospatial Technologies	COMM 220	Public Advocacy and Civic Engagement
POLS 332	Climate Change: Policy and Politics	COMM 271	Organizing Social Change
SCIL 109 / AECN 109 / ENVR 109 / GEOG 109 / NRES 109	Water in Society	COMM 283	Interpersonal Communication
SOIL 153 / PLAS 153	Soil Resources	COMM 311 / ETHN 311	Intercultural and Intergroup Communication
WATS 281 / GEOG 281 / NRES 281	Introduction to Water Science	COMM 371	Communication in Negotiation and Conflict Resolution
Credit Hours Subtotal:		COMM 375	Theories of Persuasion
<b>Human Dimensions</b>		COMM 394	Independent Study in Communication Studies
Select one course from the following:		COMM 465	Communication and Social Identity
AECN 256	Legal Aspects in Agriculture	CRPL 300	The Community and the Future
AECN 346	World Food Economics	CRPL 470	Environmental Planning and Policy
AECN 357 / NREE 357	Natural Resource and Environmental Law	CRPL 471	Environmental Impact Assessment
AECN 376	Rural Community Economics	CRPL 472	Hazard Mitigation Planning
AECN 456 / NREE 456	Environmental Law	ENGL 317	Literature and the Environment
AECN 457 / NREE 457 / WATS 457	Water Law	ENSC 110	Energy in Perspective
PLAS 435 / NRES 435	Agroecology	ENSC 220	Introduction to Energy Systems
ALEC 202	Foundations of Leadership Theory and Practice	ENSC 230	Energy and the Environment: Economics and Policy
ALEC 388 / AECN 388	Ethics in Agriculture and Natural Resources	ENVR 189H	University Honors Seminar
ALEC 393	Digital Imaging and Storytelling in Agriculture and Natural Resources	GEOG 140	Introductory Human Geography
ALEC 410 / NRES 413	Environmental Leadership	GEOG 181	Global Environmental Issues
ANTH 110	Introduction to Anthropology	GEOG 272	Geography of World Regions
ANTH 130	Anthropology of the Great Plains	GEOG 334	Historical Geography of the Great Plains
ANTH 170 / GEOG 170 / GPSP 170 / NRES 170 / SOCI 170	Introduction to Great Plains Studies	GEOG 361	Urban Geography
ANTH 212 / ETHN 212	Introduction to Cultural Anthropology	GEOG 406	Spatial and Environmental Influences in Social Systems
POLS 261 / SOCI 261	Conflict and Conflict Resolution	GEOG 447	Political Geography
ANTH 351 / ETHN 351	Exploring Cross Cultural Diversities	JOMC 222	Social Justice, Human Rights and the Media
		JOMC 491	Special Topics (Climate Change Magazine Production is the course that is applicable)
		MNGT 300	Management Essentials For Contemporary Organizations
		NRES 111	Wildlife and Natural Resource Conservation
		NRES 301	Environmental Communication Skills
		NRES 409	Human Dimensions of Natural Resources
		NRES 434 / ENVR 434	Environmental Education and Interpretation
		NRES 475 / AGST 475 / CIVE 475 / CRPL 475 / GEOL 475 / PLAS 475 / POLS 475 / SOIL 475 / WATS 475	Water Quality Strategy



NSST 375	Writing and Briefing for the National Security Enterprise
NSST 376	Analysis for the National Security Establishment
PHIL 225	Environmental Ethics
POLS 104	Comparative Politics
POLS 150	Introduction to Biology, Psychology, and Politics
POLS 160 / GLST 160	International Relations
POLS 221	Politics in State and Local Governments
POLS 232	Public Issues in America
POLS 250	Genetics, Brains, and Politics
POLS 260	Problems in International Relations
POLS 268	Threats to World Order
POLS 334 / COMM 334	Polls, Politics and Public Opinion
POLS 350	Issues in Biology, Psychology, and Politics
POLS 361	The United Nations and World Politics
POLS 362	Globalization, Human Rights and Diversity
POLS 459	International Political Economy
POLS 470	International Human Rights
PSYC 181	Introduction to Psychology
PSYC 288	The Psychology of Social Behavior
PSYC 330	Psychology of Diversity
PSYC 334 / ENVR 334	Psychology of Environmental Sustainability
SOCI 101	Introduction to Sociology
SOCI 241 / AECN 276	Rural Sociology
SOCI 346	Environmental Sociology
Credit Hours Subtotal:	3
<b>Economics and Policy</b>	
Select one of the following:	3
AECN 141	Introduction to the Economics of Agriculture
AECN 345	Policy Issues in Agriculture and Natural Resources
AECN 346	World Food Economics
AECN 357 / NREE 357	Natural Resource and Environmental Law
AECN 457 / NREE 457 / WATS 457	Water Law
CRPL 470	Environmental Planning and Policy
ECON 200	Economic Essentials and Issues
ECON 211	Principles of Macroeconomics
ECON 212	Principles of Microeconomics
NRES 323	Natural Resources Policy
Credit Hours Subtotal:	3
<b>Total Credit Hours</b>	<b>18</b>

## Sustainability Studies Minor

The sustainability studies minor will prepare students to contribute solutions for current and future local, regional, and global environmental challenges. Stewardship and the efficient, sustainable use of environmental, financial, and human resources will be the foundational concepts for this minor. More specifically, the educational component of this minor will provide students with explicit opportunities to engage in the community and develop skill sets to employ a systems approach to managing the growth of our habitats, and at the same time achieve a balance of economic development with the conservation of the earth's natural system. This minor will be available to all University of Nebraska–Lincoln students upon approval of individual colleges.

**Learning Outcomes:** The University of Nebraska–Lincoln undergraduate minor, sustainability studies, introduces students to the concepts, principles, and issues that inform the paradigm of sustainability and the efficient and sustainable use of environmental, financial, and human resources. The curriculum integrates classroom learning and community-based learning and research in a program that prepares students for future endeavors.

Upon completion of the requirements for the Society and the Environment, students will be able to:

- Explain the relationship among social, economic, and environmental systems for the development of solutions for global environmental and natural resource issues.
- Employ concepts of sustainability to the campus and community by engaging in the challenges and solutions of applied sustainability.
- Utilize problem-solving skills to address real world opportunities to help create healthier ecosystems and communities.
- Demonstrate the ability to effectively communicate to a range of audiences through the preparation of written documents along with oral and visual presentations that are consistent with professional standards.

The 18-credit-hour minor includes 9 credit hours of core courses. Each student chooses an additional 9 credit hours of elective courses from one of three tracks. These elective hours should include at least one 300-level and one 400-level course. Students and advisors need to be aware that prerequisites may be required for some courses. These need to be addressed during the advising process.

### Core Courses

ARCH 107	Sustainability Basics and the Built Environment (ACE 8)	3
ENVR 201	Science, Systems, Environment and Sustainability (ACE 8)	3
ENVR 319	Environmental Engagement and the Community	2
ENVR 495	Internship in Environmental Studies	1
Credit Hours Subtotal:		9

### Elective Courses

Select one track of the following: 9

#### Track 1: Built Environment

Select 9 credits of the following:

LARC 200 / GEOG 200 / PLAS 200	Landscape and Environmental Appreciation (ACE 7 & 9)
--------------------------------	--

CIVE 321 / BSEN 321	Principles of Environmental Engineering <sup>1</sup>
CIVE 491	Special Topics in Civil Engineering
ARCH 333	Building Environmental Technical Systems I <sup>1</sup>
CONE 450	Sustainable Construction
NRES 409	Human Dimensions of Natural Resources

**Track 2: Community Development**

Select 9 credits of the following:

AECN 376	Rural Community Economics <sup>1</sup>
CRPL 400	Introduction to Planning (ACE 8)
CRPL 433	GIS in Environmental Design and Planning
CRPL 470	Environmental Planning and Policy
CRPL 471	Environmental Impact Assessment
CRPL 472	Hazard Mitigation Planning
LARC 200 / GEOG 200 / PLAS 200	Landscape and Environmental Appreciation
NRES 409	Human Dimensions of Natural Resources
SOCI 346	Environmental Sociology

**Track 3: Food, Environment, and the Landscape**

Select 9 credits of the following:

PLAS 435 / NRES 435	Agroecology (ACE 10)
PLAS 326	Landscape Solutions <sup>1</sup>
Any 400-level PLAS course	
AECN 346	World Food Economics (ACE 9) <sup>1</sup>

Credit Hours Subtotal: 9

**Total Credit Hours 18**<sup>1</sup> Prerequisites required and need to be addressed during the advising process.**Grade Rules****C- and D Grades**

A grade of C or above is required for all courses in the minor.

**Pass/No Pass**

No course taken Pass/No Pass will be counted toward the 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**Offered:** FALL**Prerequisite for:** SCIL 300**ACE:** ACE 8 Civic/Ethics/Stewardship ACE 4 Science**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 with Option**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

**Experiential Learning:** Case/Project-Based Learning

**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 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

**Course and Laboratory Fee:** \$40

**Experiential Learning:** Community Engagement

**ENVR 489 Environmental Studies Senior Thesis I**

**Prerequisites:** ENVR major or minor; junior or senior standing

**Notes:** First course of a two-semester sequence of courses consisting of ENVR 489 and 499. Letter Grade only.

**Description:** Preparation for writing the required senior thesis.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Grading Option:** Graded

**Prerequisite for:** ENVR 499

**ACE:** ACE 10 Integrated Product

**ENVR 489H Honors: Environmental Studies Senior Thesis I**

**Prerequisites:** University Honors Program; ENVR major or minor; junior or senior standing;

**Notes:** First course of a two-semester sequence of courses consisting of ENVR 489H and 499H. Letter Grade only.

**Description:** Preparation for writing the required senior thesis.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Grading Option:** Graded

**ACE:** ACE 10 Integrated Product

**Experiential Learning:** Research

**ENVR 495 Internship in Environmental Studies**

**Prerequisites:** Permission.

**Description:** Experience in off-campus setting that is directly relevant to environmental studies.

**Credit Hours:** 1-6

**Min credits per semester:** 1

**Max credits per semester:** 6

**Max credits per degree:** 6

**Grading Option:** Graded with Option

**ENVR 496 Independent Study**

**Prerequisites:** Permission.

**Description:** Independent reading or research under direction of a faculty member.

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 6

**Grading Option:** Graded with Option

**ENVR 499 Environmental Studies Senior Thesis II**

**Prerequisites:** ENVR 489

**Notes:** Second course of a two-semester sequence of courses consisting of ENVR 489 and 499.

**Description:** Required thesis written under the supervision of the emphasis advisor or a faculty member designated by the advisor.

**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 II**

**Prerequisites:** ENVR 489H

**Notes:** Second course of a two-semester sequence of courses consisting of ENVR 489H and 499H.

**Description:** Required thesis written under the supervision of the emphasis advisor or a faculty member designated by the advisor.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**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 & Sustainability Studies- Natural Resources 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

- Master's Degree, Environmental Science and Policy, Indiana University – Bloomington, IN
- Master's Degree, Energy, Technology, & Policy, Humboldt 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
- Juris Doctorate, University of Nebraska College of Law – Lincoln, NE

### **Jobs of Recent Graduates**

- Environmental Education Intern, Pottawatomie Conservation – Honey Creek, IA
- Assistant Scientist, Olsson – Lincoln, NE
- Scientist, State of Nebraska Department of Agriculture – Lincoln, NE
- Manager, Glacial Till Winery – Lincoln, NE
- Integrated Water Management Planner Assistant, Nebraska Dept of Natural Resources – Lincoln, NE
- Biological Technician, United States Dept of Agriculture-AMRU – Lincoln, NE
- Crime Analyst, Lincoln Police Department – Lincoln, NE
- Integrated Management Technical Assistant, Nebraska Dept of Natural Resources – Lincoln, NE

### **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, Natural Resources, University of Nebraska-Lincoln – Lincoln, NE
- Master's Degree, Agronomy-Plant Pathology, University of Nebraska-Lincoln – Lincoln, NE