

ENVIRONMENTAL SCIENCE, BACHELOR OF SCIENCE WITH A CONCENTRATION IN GEOGRAPHY AND PLANNING

Requirements

Code	Title	Credits
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Required core courses:

(Note that in the case of cross-listed courses, Environmental Science majors must enroll in the ENVN section.)

ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS	2
ENVN/GEOG/GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT	3
GEOL 1010	ENVIRONMENTAL GEOLOGY	3

Minimum of 1 credit hour of ENVN 4800 must be completed (up to 3 credits can be applied to the major)

ENVN/BIOL 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING	1-3
ENVN/BIOL/GEOG/PA 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS	3

Also required:

An approved course in statistics (BIOL 4110, STAT 1530, STAT 3000, PSYC 3130, SOC 2130) 3-4

An approved course focusing on the human dimensions of environmental studies (ANTH 4250, ENVN 3180, ENVN 4270, SOC 4760, PHIL 3180, PSCI 4270) 3

Introductory GIS lecture and lab:

GEOG 3530	CARTOGRAPHY AND DATA VISUALIZATION	4
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Geography and Planning Concentration requirements:

Select one physical geography course from the following: 4

GEOG 1030	OUR DYNAMIC PLANET: INTRODUCTION TO PHYSICAL GEOGRAPHY	
GEOG 1050	HUMAN-ENVIRONMENT GEOGRAPHY	

Select three courses from the following in Human Geography and Planning: 9

GEOG 1020	INTRODUCTION TO HUMAN GEOGRAPHY	
GEOG 4120	URBAN GEOGRAPHY	
GEOG 4160	URBAN SUSTAINABILITY	
ENVN 4330	INTRODUCTION TO GREEN INFRASTRUCTURE	

Or alternative courses approved by advisor.

Select three courses in Physical Geography: 9-12

GEOG 3440	NEBRASKA NATURAL RESOURCES MANAGMENT	
GEOG 3510 & GEOG 3514	METEOROLOGY and INTRODUCTION TO METEOROLOGY LABORATORY (*)	

GEOG/BIOL/GEOL 4100	BIOGEOGRAPHY	
GEOG 4260	PROCESS GEOMORPHOLOGY	
GEOG 4320	CLIMATOLOGY	
GEOG/GEOL 4330	SOIL GENESIS, MORPHOLOGY AND CLASSIFICATION	
GEOG 4340	WATER RESOURCES	
GEOG 4350	GLOBAL CLIMATE CHANGE	
GEOG/GEOL 4640	CRITICAL ZONE SCIENCE	
• Both GEOG 3510 and GEOG 3514 must be completed and count as a single course towards this requirement.		

Select two additional courses in Geospatial Sciences: 6-8

GEOG 4020	SPATIAL ANALYSIS IN GEOGRAPHY	
GEOG 4030	COMPUTER MAPPING AND VISUALIZATION	
GEOG 4050	GEOGRAPHIC INFORMATION SYSTEMS I	
GEOG 4630	ENVIRONMENTAL REMOTE SENSING	
GEOG 4660	GEOGRAPHIC INFORMATION SYSTEMS II	

Required cognate courses:

BIOL 1330	ENVIRONMENTAL BIOLOGY	3
CHEM 1010 & CHEM 1014	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY and CHEMISTRY IN THE ENVIRONMENT AND SOCIETY LABORATORY	4

Select one computer science course from the following: 3

CIST 1300	INTRODUCTION TO WEB DEVELOPMENT	
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT	

Select two additional courses in Biology from the following: 6-9

BIOL 1020	PRINCIPLES OF BIOLOGY	
BIOL 3340	ECOLOGY	
BIOL 3530	FLORA OF THE GREAT PLAINS	
BIOL 4120	CONSERVATION BIOLOGY	
BIOL 4180	FRESHWATER ECOLOGY	
BIOL 4210	FIRE ECOLOGY	
BIOL/ENVN 4410	WETLAND ECOLOGY AND MANAGEMENT	

Physics lecture and lab: 5

PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY	
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Total Credits 71-82

Writing in the Discipline

All students are required to take a writing in the discipline course within their major. For the Environmental Science major with a concentration in Geography and Planning, the writing in the discipline requirement can be fulfilled by completing [ENGL 3980](#).

Freshman

Fall		Credits
BIOL 1330	ENVIRONMENTAL BIOLOGY	3
ENGL 1150	ENGLISH COMPOSITION I (*)	3
GEOG 1020	INTRODUCTION TO HUMAN GEOGRAPHY (**)	3
MATH 1220 or MATH 1300	COLLEGE ALGEBRA (***) or COLLEGE ALGEBRA WITH SUPPORT	3
Humanities and Fine Arts/US Diversity		3

*ENGL 1150: requires appropriate placement.
 **GEOG 1020 counts within the Human Geography category of the major and as a prerequisite for GEOG 3530. It may also be used for a social science/global diversity.
 ***MATH: Math 1220/1300 or higher. Please see the catalog for the most up-to-date Math prerequisites.

		Credits	15
Spring			
CHEM 1010 & CHEM 1014	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY and CHEMISTRY IN THE ENVIRONMENT AND SOCIETY LABORATORY (*)	4	
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3	
ENGL 1160	ENGLISH COMPOSITION II (**)	3	
ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS (***)	2	
GEOG 1030 or GEOG 1050	OUR DYNAMIC PLANET: INTRODUCTION TO PHYSICAL GEOGRAPHY or HUMAN-ENVIRONMENT GEOGRAPHY	4	
*CHEM 1010: Requires MATH 1220 (or MATH 1300) or higher or proficiency via ACT, SAT, AP, or Math Placement Exam			
**ENGL 1160: requires ENGL 1150 or appropriate placement.			
***ENVN 2010: requires BIOL 1330 or GEOL 1010 or GEOG 1050 or concurrent enrollment.			

		Credits	16
Sophomore			
Fall			
GEOL 1010	ENVIRONMENTAL GEOLOGY	3	
CIST 1300 or ISQA 3310	INTRODUCTION TO WEB DEVELOPMENT (*) or MANAGING THE DATABASE ENVIRONMENT	3	
STAT 3000 or PSYC 3130 or SOC 2130 or STAT 1530	STATISTICAL METHODS I (**) or STATISTICS FOR THE BEHAVIORAL SCIENCES or SOCIAL STATISTICS or ELEMENTARY STATISTICS	3	
Humanities and Fine Arts/ US Diversity		3	
Social Science		3	
*CIST 1300: MATH 1220/1300 or 1120 or 1130 or higher. A programming course is one of the prerequisites for GEOG 3530. ISQA 3310 requires CIST 2100 as a prereq, which can be used as a social science.			
**Statistics: several options are available for students, most requiring MATH 1220/1300 or higher or proper placement as a prereq. Speak with your advisor for more options.			
*120 total credits are required for a degree, with a minimum of 18 upper level (3000-4000) credits in the major and 27 upper level credits throughout the degree. Selecting 3000-4000 level electives or course options (such as statistics) can help you reach these minimums.			

		Credits	15
Spring			
BIOL 1020	PRINCIPLES OF BIOLOGY	4	
GEOG 3530	CARTOGRAPHY AND DATA VISUALIZATION (*)	4	
Approved Physical Geography course		3	

Approved Physical Geography course 3
 *GEOG 3530 – requires GEOG 1000 or 1020; GEOG 1030 or GEOG 1050; a programming course such as CIST 1300; and a statistics course, such as STAT 3000 or PSYC 3130 or SOC 2130 or STAT 1530.

		Credits	14
Junior			
Fall			
Approved Geospatial Science course		4	
Approved Physical Geography course		4	
Approved Human Geography & Planning course		4	
Humanities and Fine Arts*		3	
*HFA – must be in a 2nd discipline			

		Credits	15
Spring			
ENGL 3980	TECHNICAL WRITING ACROSS THE DISCIPLINES (*)	3	
PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY (**, ***)	5	
Approved Geospatial Science course		4	
Social Science^		3	
*ENGL 3980: requires ENGL 1160 or appropriate placement.			
**PHYS 1050: HS algebra or equivalent			
***PHYS 1054: HS algebra or equivalent; PHYS 1050 prior or concurrent			
^ SS – must be in a 2nd discipline			

		Credits	15
Summer			
ENVN 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING (*)	1-3	
*ENVN 4800: requires permission of instructor.			

		Credits	1-3
Senior			
Fall			
ENVN/GEOG/GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT (*)	3	
ENVN 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS (**)	3	
Approved Human Geography & Planning course		3	
An approved course focusing on the human dimensions of environmental studies		3	
Elective course***		3	
*ENVN/GEOG/GEOL/BIOL 4610 – requires permission of instructor.			
**ENVN 4820 – requires permission of instructor.			
***120 total credits are required for a degree, with a minimum of 18 upper level (3000-4000) credits in the major and 27 upper level credits throughout the degree. Selecting 3000-4000 level electives can help you reach these minimums.			

		Credits	15
Spring			
Approved Biology course		3	
Elective course*		3	
Elective course*		3	
Elective course*		3	
Elective course, if needed to reach 120*		3	

*120 total credits are required for a degree, with a minimum of 18 upper level (3000-4000) credits in the major and 27 upper level credits throughout the degree. Selecting 3000-4000 level electives can help you reach these minimums.

Credits	15
Total Credits	121-123

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the course sequence based on availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract, and the curriculum is subject to change.

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. To graduate on time (four years for an undergraduate degree), you must take 30 hours each year.

Placement Exams: For Math, English, and Foreign Languages, a placement exam may be required. More information on these exams can be found at <https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php>.

**Transfer credit or placement exam scores may change the suggested plan of study