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

Environmental Science, Bachelor of Science with a Concentration in Geography and Planning Requirements

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 46 Hours Required		
Minimum of "C-"required		
Fundamental Academic Skills		**15**
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline Course		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1100	DATA LITERACY AND VISUALIZATION	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
or STAT 1100	DATA LITERACY AND VISUALIZATION	
or STAT 1530	ELEMENTARY STATISTICS	
Distribution Requirements		**31**
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - From two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines- 9 hrs		
Global Diversity - 3 hrs		
US Diversity - 3 hrs		
MAJOR REQUIREMENTS		
Environmental Science Major with a Geography and Planning - 71-82 Hours Required		
Required coursework		**12-14**
(Note that in the case of cross-listed courses, Environmental Science majors must enroll in the ENVN section)		
ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS (^)	
ENVN/GEOG/ GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT	
GEOL 1010	ENVIRONMENTAL GEOLOGY (**)	
ENVN/BIOL 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING	
ENVN 4820/4820/ PA 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS	
Select one of the following Statistics courses		**3-4**
BIOL 4110	STATISTICS FOR BIOLOGICAL SCIENCES (^)	
ENVN 2020	STATISTICS FOR LIFE AND ENVIRONMENTAL SCIENCE	
STAT 1530	ELEMENTARY STATISTICS (^)	
STAT 3000	STATISTICAL METHODS I (^)	
PSYC 3130	STATISTICS FOR THE BEHAVIORAL SCIENCES (^)	
SOC 2130	SOCIAL STATISTICS (^)	
Select one of the following courses on the Human Dimensions of Environmental Studies		**3**
ANTH 4250	ENVIRONMENTAL ANTHROPOLOGY AND NATIVE PEOPLES OF THE GREAT PLAINS	
ECON 3320	ENVIRONMENTAL ECONOMICS AND SUSTAINABILITY	
ENVN/PHIL 3180	ENVIRONMENTAL ETHICS (^)	
ENVN 3310	SUSTAINABILITY AND THE ENVIRONMENT IN THE SPANISH-SPEAKING WORLD	
ENVN/PSCI 4270	GLOBAL ENVIRONMENTAL POLITICS (^)	
ENVN 4390	THE NATURE OF THE PAST: AMERICAN ENVIRONMENTAL HISTORY, PRE-HISTORY TO THE PRESENT	
SOC 4760	ENVIRONMENTAL SOCIOLOGY (^)	
Introductory GIS lecture and lab		**4**
GEOG 3530	CARTOGRAPHY AND DATA VISUALIZATION (^)	
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**
GEOL 4200	WATER QUALITY	
GEOG 3440	NEBRASKA NATURAL RESOURCES MANAGMENT	
GEOG 3510 & GEOG 3514	METEOROLOGY and INTRODUCTION TO METEOROLOGY LABORATORY [1]	
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	
1 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 courses:		**7**
BIOL 1330	ENVIRONMENTAL BIOLOGY	
CHEM 1010 & CHEM 1014	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY and CHEMISTRY IN THE ENVIRONMENT AND SOCIETY LABORATORY (***^)	
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	
ENVN 3030	MICROBIAL ECOLOGY	
ENVN 4320	ECOLOGICAL SUSTAINABILITY AND HUMAN HEALTH	
Physics lecture and lab:		**5**
PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY (** ^)	
College Breadth		**0**
College of Arts and Sciences' breadth requirement satisfied by this major		
Bachelor of Science Cognate Requirement		**0**
See major.		
ELECTIVES		
Elective hours as required to reach a total of 120 hours		

Environmental Science, Bachelor of Science with a Concentration in Geography and Planning Four Year Plan

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 prerequiste 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*		2
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	**14**
	Total Credits	**120-122**

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