

# ENVIRONMENTAL STUDIES MAJOR (BS)

Department website (<https://www.uwp.edu/learn/programs/environmentalstudiesmajor.cfm>)

College: College of Natural & Health Sciences

## Program Learning Outcomes

1. Understand the physical, biological and social forces that govern the development and evolution of environmental systems and demonstrate expertise in how these systems can be sustainably managed.
2. Collect, manage and analyze quantitative data to draw inferences about the nature of reality.
3. Work collaboratively as part of an interdisciplinary team to analyze and solve environmental problems through a combination of content knowledge and critical reasoning.
4. Analyze the roles of economics, politics, and society in evaluating and resolving environmental issues and have a thorough understand local, national, and international environmental laws, regulations and policies.
5. Effectively communicate environmental problems and solutions to both professional and non-professional audiences.

## Requirements for the Environmental Studies Major

The major in environmental studies consists of 40 credits forming a core curriculum with an additional 27-32 credits within the students chosen concentration area.

Code	Title	Credits
<b>College of Natural and Health Sciences requirement</b>		
New entering students, and transfer students with less than 30 college credits, choosing a major in the College of Natural and Health Sciences are required to take this course.		
UWP 101	First Year Seminar: Natural and Health Sciences	1
<b>Core Courses</b>		
<i>Required Courses</i>		
ENVS 101	Introduction to Environmental Studies	3
ENVS 102	Chemistry of the Environment	3
ENVS 109	Fundamentals of Climate Change	3
ENVS 201	Laboratory Experience in Environmental Studies	3
ENVS 335	Energy	4
ENVS 336	Environmental Justice	3
ENVS 495	Environmental Studies Seminar	1
GEOG 108	Culture and Environmental Sustainability	3
PHYS 101	Principles of Physics	4
<i>Math Requirement</i>		
MATH 111	College Algebra I	5
<i>Writing Requirement</i>		
Select one of the following:		3
ENGL 201	Advanced Composition	
ENGL 202	Technical Writing	

ENGL 204	Writing for Business and Industry	
<i>Policy, Society, and Ethics Requirement</i>		
Select two of the following:		6
ANTH 100	Introduction to Anthropology	
PHIL 206	Introduction to Ethics	
POLS 100	American Politics <sup>1</sup>	
SOCA 101	Introduction to Sociology	
Core Courses Subtotal		42
<b>Required Concentrations</b>		
Choose one option		27-32
Required Concentrations Subtotal		27-32
<b>Total Credits</b>		<b>69-74</b>

<sup>1</sup> Environmental Policy and Society Concentration majors must use POLS 100 for their concentration requirement so must take 2 other courses from this option.

## Required Concentrations

### Choose one concentration:

#### Environmental Biology Concentration

Code	Title	Credits
BIOS 101	Bioscience	4
BIOS 102	Organismal Biology	4
BIOS 210	Biostatistics	4
BIOS 305	Principles of Ecology	4
BIOS 333	Restoration Ecology	4
BIOS 336	Conservation Ecology	3
MATH 114	College Algebra II/Trigonometry	5
BIOS 305 is a prerequisite for BIOS 333. MATH 114 is a prerequisite for BIOS 210. MATH 112 and MATH 113 may be used together in place of MATH 114.		
Select one of the following:		4
BIOS 313	Invertebrate Zoology	
BIOS 318	Vertebrate Zoology	
BIOS 324	Botany	
BIOS 340	Animal Behavior	
<b>Total Credits</b>		<b>32</b>

Students may satisfy the requirements for a biological sciences minor with this concentration. It is the student's responsibility to officially declare the minor by submitting a plan declaration form to the department.

#### Environmental Chemistry Concentration

Code	Title	Credits
CHEM 101	General Chemistry I	4
CHEM 102	General Chemistry II	4
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry Lab II	1
CHEM 206	Quantitative Chemical Analysis	5
CHEM 230	Introduction to Green Chemistry	2
CHEM 321	Organic Chemistry I	4
CHEM 322	Organic Chemistry II	4

CHEM 323	Organic Chemistry Lab	2
<b>Total Credits</b>		<b>27</b>

Students may satisfy the requirements for a chemistry minor and a certificate in green chemistry with this concentration. It is the student's responsibility to officially declare the minor by submitting a plan declaration form to the department.

### Environmental Geography Concentration

Code	Title	Credits
<b>Required Courses</b>		
GEOG 100	Physical Geography and the Environment	3
GEOG 326	Biogeography	3
GEOG 350	Cartography and GIS	3
GEOG 365	Geography in Land Use Planning	3
GEOG 382	Soil Ecosystems and Resources	3
GEOG 384	Landscape Ecology	3
GEOG 460	Introduction to Geographic Information Systems Analysis	3
GEOG 465	Advanced Geographic Information Systems Applications	3
Required Courses Subtotal		24
<b>Elective Courses</b>		
Select two of the following:		6-8
GEOG 324	Landforms and Environmental Processes	
GEOG 355	Field Mapping	
GEOG 370	GIS and Planning	
GEOG 396	Field Methods in Geography	
GEOG 410	GIS and Communities	
<b>Total Credits</b>		<b>30-32</b>

Students may satisfy the requirements for a geography minor and GIS certificate with this concentration. It is the student's responsibility to officially declare the minor by submitting a plan declaration form to the department.

### Environmental Geology Concentration

Code	Title	Credits
GEOS 101	Introductory Geology	3
GEOS 102	Origin and History of the Earth	3
GEOS 104	Introductory Geology Laboratory	2
GEOS 200	Minerals and Rocks	4
GEOS 301	Geomorphology	4
GEOS 330	Environmental Geology	4
GEOS 420	Glacial Geology	4
GEOS 445	Environmental Sampling, Monitoring, and Assessment	4
<b>Total Credits</b>		<b>28</b>

Students may satisfy the requirements for a geosciences minor with this concentration. It is the student's responsibility to officially declare the minor by submitting a plan declaration form to the department.

### Environmental Policy and Society Concentration

Code	Title	Credits
<b>Required courses:</b>		
ANTH 382	Environmental Anthropology	3

ECON 120	Principles of Microeconomics	3
ECON 300	Environmental Economics	3
GEOG 308	Conservation of Cultural and Natural Resources	3
GEOG 365	Geography in Land Use Planning	3
POLS 100	American Politics	3
POLS 202	Public Policy	3
POLS 302	Environmental Policy	3
POLS 100 is a prerequisite for POLS 202. POLS 202 is a prerequisite for POLS 302.		

#### Elective courses:

Select two of the following:		6
PHIL 342	Environmental Ethics	
POLS 307	Contemporary Political Thought	
POLS 312	Introduction to Global Warming Policy and Governance	
SOCA 379	Society and Environment	
<b>Total Credits</b>		<b>30</b>

Students may satisfy most requirements for a Political Science Minor. It is the student's responsibility to officially declare the minor by submitting a plan declaration form to the department.

### General Environmental Studies Concentration

To complete this concentration, students must complete the following:

- Choose at least two courses from four other concentrations (above). These must be unique courses; a student cannot count a course in two different concentrations.<sup>1</sup>
- Students must complete a minimum of thirty (30) credits overall within the courses offered within the concentrations. This may require students to take more than two (2) classes from certain concentrations. This may or may not be satisfied by completing #1.
- Students must complete of at least twelve (12) credits at the 300 level or higher.

<sup>1</sup> Within the environmental chemistry concentration, CHEM 101 General Chemistry I/CHEM 103 General Chemistry Lab I and CHEM 102 General Chemistry II/CHEM 104 General Chemistry Lab II are paired as a lecture/laboratory and if students choose these course pairs, each pair is counted as one course for students pursuing the general environmental studies concentration.

Depending on the courses taken within each concentration, students may qualify for a minor in the department offering the majority of courses within the concentration. Please consult with your advisor for more information.

## General University Degree Requirements (Bachelor's Degree)

In addition to individual program requirements, students must also fulfill the following requirements:

Requirement	Credits
Skills	7-8
General Education	36
Foreign Language**	6-8

Ethnic Diversity	3
Total	52-55

\*\* Transfer students in sustainable management, and health information management and technology collaborative, online degree-completion programs, the business management online degree-completion program, and the flexible option degree-completion program will be exempt from the university's foreign language requirement. See appropriate academic section for further information.

Skills Requirement (<https://catalog.uwp.edu/policies/#skills>)

Code	Title	Credits
<b>Reading and Writing</b>		
ENGL 101	Composition and Reading	3
<b>Computational Skills</b>		
Select one of the following:		4-5
MATH 102	Quantitative Reasoning	
MATH 103	Elementary Statistics	
MATH 104	College Mathematics with Applications	
MATH 111	College Algebra I	
<b>Total Credits</b>		<b>7-8</b>

General Education (<https://catalog.uwp.edu/policies/#general>)

- General Education Course List (<https://catalog.uwp.edu/programs/general-education-program/#coursestext>)

Foreign Language (<https://catalog.uwp.edu/policies/#language>)

Ethnic Diversity (<https://catalog.uwp.edu/policies/#ethnic>)

Degree Requirements

Requirement	Credits
Minimum Total Credits	120
Upper Level Credits (300 level or above)	36
Residency	30

Cumulative Degree GPA: 2.0 minimum

Course	Title	Credits
<b>Year 1</b>		
<b>Fall Semester</b>		
MATH 102	Quantitative Reasoning	4
ENGL 100	Fundamentals of English	3
Introductory Language		4
COMM 107	Communication and the Human Condition	3
<b>Credits</b>		<b>14</b>
<b>Spring Semester</b>		
ENGL 101	Composition and Reading	3
COMM 105 or COMM 205	Public Speaking for the 21st Century or Oral Interpretation	3
COMM 108	Media and Society	3
Introductory Language		4
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>27</b>