

# BS IN ENVIRONMENTAL STUDIES

Units required for Major: 67-69  
Total units required for BS: 120

## Program Description

The Environmental Studies program can help students use the resources of the entire University to gain an interdisciplinary understanding of such increasingly serious issues as pollution, wildlife and wilderness preservation, land use, biodiversity loss, resource depletion, energy conservation, and a generally healthful relationship between nature and society.

The major is designed to help students understand environmental issues in their political, social, and scientific context. Because dealing with environmental issues requires an interdisciplinary approach, we emphasize the development of strong writing, research, and quantitative skills and a broad liberal arts perspective.

## Minimum Grade Requirement

A minimum grade of "C-" is required in all courses required for the Environmental Studies B.A. and B.S. majors.

## Program Requirements

Code	Title	Units
<b>Required Lower Division Courses (24 Units)</b>		
BIO 1	Biodiversity, Evolution and Ecology <sup>1</sup>	5
BIO 2	Cells, Molecules and Genes	5
or BIO 10 & BIO 15L	Basic Biological Concepts Laboratory Investigations in Biology	
CHEM 1A	General Chemistry I <sup>1</sup>	5
or CHEM 6A	Introduction to General Chemistry	
ECON 1B	Introduction to Microeconomic Analysis <sup>1</sup>	3
ENVS 10	Introduction to Environmental Science	3
GEOG 1	Physical Geography: The Distribution of Natural Phenomena <sup>1</sup>	3
or GEOL 10	Physical Geology	
<b>Required Upper Division Courses (21 Units)</b>		
BIO 160	General Ecology	3
ENVS 111	Environmental Ethics	3
ENVS 112	International Environmental Problems <sup>1</sup>	3
ENVS 120	Quantitative Methods for Environmental Science	3
ENVS 121	Field Methods in Environmental Science	2
ENVS 187	Environmental Studies Seminar	1
ENVS 190	Senior Thesis	3
ENVS 195	Environmental Studies Internship	3
<b>Policy Electives (3 Units)</b>		
Select one of the following courses:		3
ENVS 122	Environmental Impact Analysis: CEQA and NEPA	
ENVS/POLS 128	Environment and the Law	
ENVS/POLS 171	Environmental Politics and Policy	

<b>Environmental Science Electives (9 Units)</b>		
Select three of the following courses:		9
ENVS 110	Contemporary Environmental Issues	
ENVS 130	Environmental Toxicology	
ENVS 135	California Water and Society	
ENVS 137	Conservation and Society	
ENVS 144	Sustainability Science & Policy	
ENVS 140	Energy, Society, and the Environment	
ENVS 147	Urban Agriculture and Aquaponics	
ENVS 149	Agroecology	
ENVS 151	Restoration Ecology	
ENVS 158	Wetlands Ecology	
<b>Interdisciplinary Electives (9 Units)</b>		
Select three of the following courses:		9
BIO 103	Plants and Civilization	
BIO 112	Plant Taxonomy	
BIO 118	Natural Resource Conservation	
BIO 157	General Entomology	
BIO 162	Ichthyology: The Study of Fishes	
BIO 164	Amphibians and Reptiles: An Introduction to Herpetology	
BIO 166	Ornithology	
BIO 168	Mammalogy	
BIO 169	Animal Behavior	
BIO 173	Principles of Fisheries Biology	
BIO 179	Conservation Biology & Wildlife Management	
ENVS/SOC 138	Introduction to Environmental Sociology	
ENVS 163	Ethnoecology	
GEOG 107	Remote Sensing	
GEOG 109	Geographic Information Systems	
GEOG 110	Advanced Geographic Information Systems	
GEOG 111	Elements Of Meteorology	
GEOG 113	Climate	
GEOG 115	Biogeography	
GEOG 116	Global Climate Change	
GEOG 118	Earth Transformed	
GEOG 161	California's Water Resources	
GEOL 127	Hydrogeology	
GEOL 130	Oceanography	
GEOL 140	Geology and the Environment <sup>1</sup>	
HIST 139A	Global Environmental History in the Age of Imperialism, 1450-Present Day	
HIST 165	American Environmental History	
RPTA 153	Environmental Interpretation	
<b>Other Courses (require instructor permission) (1-3 Units)</b>		
ENVS 199	Special Problems	1 - 3
<b>Total Units</b>		<b>67-69</b>

<sup>1</sup> Course also satisfies General Education (GE)/Graduation Requirement.

## General Education Requirements <sup>1</sup>

Code	Title	Units
<b>Area A: Basic Subjects (9 Units)</b>		
A1	Oral Communication	3
A2	Written Communication	3
A3	Critical Thinking	3
<b>Area B: Physical Universe and Its Life Forms (3 Units)</b>		
B1	Physical Science <sup>2</sup>	0
B2	Life Forms <sup>2</sup>	0
B3	Lab (Note: Lab experience to be taken with one of the following: B1, B2 or B5) <sup>2</sup>	0
B4	Math Concepts	3
B5	Additional Course (Any B to reach 12 units) - Take upper-division course to complete Area & upper division requirements. <sup>2</sup>	0
<b>Area C: Arts and Humanities (12 Units)</b>		
C1	Arts	3
C2	Humanities	3
C1/C2	Area C Course	3
C1/C2	Area C Course - Take upper-division course to complete Area & upper division requirements.	3
<b>Area D: The Individual and Society (3 Units)</b>		
Area D Course		3
Area D Course <sup>2</sup>		0
Area D Course	- Take upper-division course to complete Area & upper division requirements. <sup>2</sup>	0
<b>Area E: Understanding Personal Development (3 Units)</b>		
Area E Course		3
<b>Area F: Ethnic Studies</b>		
Area F Course		
<b>Total Units</b>		<b>30</b>

<sup>1</sup> To help you complete your degree in a timely manner and not take more units than absolutely necessary, there are ways to use single courses to meet more than one requirement (overlap). For further information, please visit the General Education page (<https://catalog.csus.edu/colleges/academic-affairs/general-education/>).

**Note:** There is no way to list all possible overlaps so please consult with a professional advisor. The Academic Advising Center can be visited online (<http://www.csus.edu/acad/>), by phone (916) 278-1000, or email ([advising@csus.edu](mailto:advising@csus.edu)).

<sup>2</sup> Required in Major; also satisfies GE.

## Graduation Requirements <sup>1</sup>

Code	Title	Units
<b>Graduation Requirements (required by CSU) (6 Units)</b>		
	American Institutions: U.S. History	3
	American Institutions: U.S. Constitution & CA Government	3
	Writing Intensive (WI) <sup>2</sup>	0
<b>Graduation Requirements (required by Sacramento State) (12 Units)</b>		
	English Composition II	3
	Race and Ethnicity in American Society (RE)	3
	Foreign Language Proficiency Requirement <sup>3</sup>	6

<sup>1</sup> To help you complete your degree in a timely manner and not take more units than absolutely necessary, there are ways to use single courses to meet more than one requirement (overlap). For further information, please visit the General Education page (<https://catalog.csus.edu/colleges/academic-affairs/general-education/>).

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<sup>2</sup> Required in Major; also satisfies Graduation Requirement.

<sup>3</sup> If not satisfied before entering Sacramento State, it may be satisfied in General Education Area C2 (Humanities). "C- or better required." The alternative methods for satisfying the Foreign Language Proficiency Requirement are described here: <https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html> (<https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html>)

The following roadmaps are sample planning resources. Please consult your academic advisor and Academic Catalog for graduation requirements as you develop your individualized academic plan.

## Environmental Studies, BS: 4-Year Roadmap

Course	Title	Units
<b>Year 1</b>		
<b>First Semester</b>		
ECON 1B	Introduction to Microeconomic Analysis	3
ENVS 10	Introduction to Environmental Science	3
GE Area 1C - Oral Communication <sup>2</sup>		3
GE Area 3A - Arts <sup>2</sup>		3
GE Area 3B - Humanities <sup>2</sup>		3
<b>Units</b>		<b>15</b>
<b>Second Semester</b>		
BIO 1	Biodiversity, Evolution and Ecology	5
GEOG 1 or GEOL 10	Atmosphere, Landscapes & Life: Intro to Physical Geography <sup>3</sup> or Physical Geology	3
GE Area 1A - English Composition <sup>2</sup>		3
GE Area 2 - Mathematical Concepts & Quantitative Reasoning <sup>2</sup>		3
<b>Units</b>		<b>14</b>
<b>Year 2</b>		
<b>First Semester</b>		
BIO 2 or BIO 10 or BIO 15L	Cells, Molecules and Genes <sup>3</sup> or Basic Biological Concepts or Laboratory Investigations in Biology	1 - 5
CHEM 1A or CHEM 6A	General Chemistry I <sup>3</sup> or Introduction to General Chemistry	5
GE Area 1B - Critical Thinking <sup>2</sup>		3
GE Area 6 - Ethnic Studies <sup>2</sup>		3
<b>Units</b>		<b>12-16</b>
<b>Second Semester</b>		
BIO 160	General Ecology	3
ENVS 111	Environmental Ethics	3
ENVS 120	Quantitative Methods for Environmental Science	3
ENGL 20	College Composition II	3

Foreign Language Semester 1 <sup>2</sup>		4
<b>Units</b>		<b>16</b>
<b>Year 3</b>		
<b>First Semester</b>		
ENVS 121	Field Methods in Environmental Science	2
ENVS 187	Environmental Studies Seminar	1
Upper Division GE Area 4 - Social & Behavioral Sciences <sup>2</sup>		3
GR American Institutions (US History) <sup>2</sup>		3
Elective of Choice		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Second Semester</b>		
ENVS 112	International Environmental Problems 📍	3
ENVS 122 or ENVS 128 or POLS 128 or ENVS 171 or POLS 171	Environmental Impact Analysis: CEQA and NEPA <sup>3</sup> or Environment and the Law or Environment and the Law or Environmental Politics and Policy or Environmental Politics and Policy	3
ENVS Elective <sup>3</sup>		3
GR American Institutions (GOVT) <sup>2</sup>		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Year 4</b>		
<b>First Semester</b>		
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Second Semester</b>		
ENVS 190	Senior Thesis	3
ENVS 195	Environmental Studies Internship	3
Upper Division GE Area 3 - Arts or Humanities <sup>2</sup>		3
Upper Division GE Area 5 or 2 - Science or Mathematical Concepts/Quantitative Reasoning <sup>2</sup>		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Total Units</b>		<b>117-121</b>

ENVS 120	Quantitative Methods for Environmental Science	3
ENVS 122 or ENVS 128 or POLS 128 or ENVS 171 or POLS 171	Environmental Impact Analysis: CEQA and NEPA <sup>3</sup> or Environment and the Law or Environment and the Law or Environmental Politics and Policy or Environmental Politics and Policy	3
Upper Division GE Area 4 - Social & Behavioral Sciences + American Institutions (GOVT) <sup>2</sup>		3
Foreign Language Semester 2 <sup>2</sup>		4
<b>Units</b>		<b>16</b>
<b>Year 2</b>		
<b>First Semester</b>		
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
ENVS Elective <sup>3</sup>		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Second Semester</b>		
ENVS 190	Senior Thesis	3
ENVS 195	Environmental Studies Internship	3
ENVS Elective <sup>3</sup>		3
Upper Division GE Area 5 or 2 - Science or Mathematical Concepts/Quantitative Reasoning <sup>2</sup>		3
Elective of Choice		3
<b>Units</b>		<b>15</b>
<b>Total Units</b>		<b>62</b>

1. Any course not completed in the first semester should be taken in the second or a later semester.
2. Please see General Education/Graduation Requirement **course options** ([https://www.csus.edu/academic-affairs/curriculum-%20workflow/\\_internal/\\_documents/program-road-maps/als\\_2yr/art\\_transfer-%20roadmap-2024-25.pdf](https://www.csus.edu/academic-affairs/curriculum-%20workflow/_internal/_documents/program-road-maps/als_2yr/art_transfer-%20roadmap-2024-25.pdf)).
3. Please see an academic advisor for elective options.

## Environmental Studies, BS: 2-Year Roadmap

Course	Title	Units
<b>Year 1</b>		
<b>First Semester</b>		
BIO 160	General Ecology	3
ENVS 111	Environmental Ethics	3
ENVS 121	Field Methods in Environmental Science	2
ENVS 187	Environmental Studies Seminar	1
Foreign Language Semester 1 <sup>2</sup>		4
GR American Institutions (US History) <sup>2</sup>		3
<b>Units</b>		<b>16</b>
<b>Second Semester</b>		
ENVS 112	International Environmental Problems 📍	3