

the university of Arizona college of Agriculture & Life sciences **Environmental Science**

Minors in Environmental Science

Environmental Science

Learn the fundamentals

Soil & Water Science

Solve problems of water quality and soil health





Questions & More Information

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environmentalscience.cals.arizona.edu/undergraduate-minors



Minors in Environmental Science

You may minor in Environmental Science or Soil and Water Science in our department while majoring in a complementary alternate field of study.

Adding an undergraduate minor broadens your knowledge and increases your value to future employers.

A minimum of <u>18 units</u> is required for both minors.



Environmental Science

Learn the fundamentals in environmental science, environmental communication, and human impact on our world.

3

Soil & Water Science

Build the skills and knowledge you need to solve problems surrounding soil health and water quality.

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Take core courses in our department to gain the fundamentals in environmental science, environmental communication, and human impact on our world.

A minimum of **18 units** is required for this minor, with a total of 9 units from the upper division (300/400 level) courses.

Environmental Science Minor			
Group I: Required Core Courses, take 6 units	Course	Units	
Fundamentals of Environmental Science & Sustainability	ENVS 210	3	
Critical Zone Science	ENVS 270	3	
Group II: Environmental Science Communication Courses,	Course		
take 3 units		Units	
Data Analysis for Life and Environmental Sciences	ENVS 275		
Teaching Workshop	ENVS 397A/ BE 397A		
Scientific Writing for Environmental, Agricultural & Life Sciences	ENVS 408	3	
Translating Environmental Science	ENVS 415	1	
Group III: Human Impact Courses, take 3 units	Course	Units	
Ecosystem Health and Justice	ENVS 310	3	
Applied Research in Health and Social Injustice	CHS 250	3	
Topics in Environmental Justice	EHS 426	3	
Topics in Environmental Justice Environmental Biology	EHS 426 ECOL 206	3	
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Environmental Biology	ECOL 206	3	
Environmental Biology Geography, Social Justice and the Environment	ECOL 206 GEOG 374	3	
Environmental Biology Geography, Social Justice and the Environment Applied Environmental Law	ECOL 206 GEOG 374 LAW 445	3 3 3	



Minor

Group IV: Upper Division Courses, take 6 units	Course	Units
Environmental Chemistry	ENVS 340	3
Independent Study	ENVS 399/499	I-3
Microbial Geochemistry and Global Change	ENVS 410	3
Environmental Physics	ENVS 420	3
Environmental Microbiology	ENVS 425	3
Limnology	ENVS 442	4
Green Infrastructure	ENVS 450	3
Water Harvesting	ENVS 454	3
Environmental Soil and Water Chemistry	ENVS 462	3
Environmental Organic Chemistry	ENVS 464	3
Aquatic Plants and the Environment	ENVS 474	4
Principles of Ecotoxicology	ENVS 477	3
Environmental Assessment for Contaminated Sites	ENVS 480	3
Environmental Conservation in Australia	ENVS 495A	6
Weather, Climate and Society	ATMO 336	3
Remote Sensing for the Study of Planet Earth	ATMO 490A	3
Introduction to Human Health Risk Assessment	EHS 418	3
Introduction to Dendrochronology	GEOG 439A	3
Ocean Sciences	GEOS 412A	3
Global Change	GEOS 478	3
Geographic Information Systems for Natural and Social Sciences	GIST 417	3
Western America: Law and Order, 1785-1915	HIST 335	
OR Global Environmental History	OR HIST 356	3
OR Natural History of Disasters	OR HIST 358	
Applications of Geographic Systems	RNR 403	3



Dive deeper into the chemistry, microbiology and physics of our soil and water with courses that focus on building the skills and knowledge to help solve problems surrounding soil health and water quality.

A minimum of **18 units** is required for this minor. As a note, General Chemistry I (CHEM 141 &143, 151 or 161 &163) is required.

Soil and Water Minor			
Group I: Required Soil Courses, take 10 units	Course	Units	
Introduction to Soil Science & Soils Laboratory	ENVS 200 & 201	4	
Critical Zone Science	ENVS 270	3	
Soil Ecology	ENVS 300	3	
Group II: Water Courses, take 3-4 units	Course	Units	
Limnology	ENVS 442		
Aquatic Plants and the Environment	ENVS 474		
Principles of Ecotoxicology	ENVS 477	3-4	
Freshwater and Marine Algae	ECOL 475		
Group III: Upper Division Courses, take 9-10 units	Course	Units	
Soil Fertility and Plant Nutrition	ENVS 316	3	
Environmental Chemistry	ENVS 340	3	
Sustainable Management of Arid Lands & Salt-Affected Soils	ENVS 401	3	
Microbial Geochemistry and Global Change	ENVS 410	3	
Environmental Microbiology	ENVS 425	3	
Soil Genesis & Classification	ENVS 431	3	
Water Harvesting	ENVS 454	3	
Environmental Soil and Water Chemistry	ENVS 462	3	
Soil Physics	ENVS 470	3	
Principles of Ecotoxicology	ENVS 477	3	
Remote Sensing for the Study of Planet Earth	ATMO 490A	3	
Freshwater and Marine Algae	ECOL 475	4	
Water, Environment and Society	GEOG 304	3	
Introduction to Oceanography	GEOS 212	3	
Physical Geography	GEOS 251	4	
Ocean Sciences	GEOS 412A	3	
Water Science and the Environment	HWRS 201	3	
Environmental Water Quality Issues	HWRS 204	3	
Principles of Hydrology	HWRS 350	3	
Watershed Hydrology	WSM 460A	4	