



## Environmental Science Major – Bachelor of Science (B.S.) Degree

***The interdisciplinary B.S. in Environmental Science requires year-long core classes in Geography, Biology, Chemistry, and Physics, in addition to Calculus I & II, Statistics, E-law, Cont. E-issues, and 7 elective classes.***

### 1. University Common Curriculum (44 quarter hours)

	4	8	12	8	8	4	<u>Quarter offered</u>
First Year Seminar	qtr hrs						Fall
First Year Writing and Rhetoric		qtr hrs					Winter, Spring
Foreign Language			qtr hrs				Fall, Winter, Spring
Analytical Inquiry-Society and Culture				qtr hrs			Variable
Scientific Inquiry-Society and Culture					qtr hrs		Variable
Advanced Seminar						qtr hrs	Variable

### 2. Bachelor of Science Core (74 quarter hours)

GEOG 1201, 1202, 1203: Environmental Systems	12	qtr hrs					Fall, Winter, Spring
BIOL 1011/1021: Evolution Heredity & Biodiversity	5	qtr hrs					Winter
BIOL 1010/1020: Physiological Systems	5	qtr hrs					Spring
BIOL 2010/2011: General Ecology	5	qtr hrs					Fall
CHEM 1010/1240: General Chemistry I (+ lab)	4	qtr hrs					Fall
CHEM 1020/1250: General Chemistry II (+lab)	4	qtr hrs					Winter
CHEM 2240: Introduction to Environmental Chemistry	4	qtr hrs					Spring
PHYS 1111 (1121), 1112 (1122), 1113 (1123): General Physics	15	qtr hrs					Fall, Winter, Spring
Statistics (GEOG 2000, BIOL 2090, or PSYC 2300)	4	qtr hrs					Spring
MATH 1951 and 1952: Calculus I and II	8	qtr hrs					Variable
ENVI 3000: Environmental Law	4	qtr hrs					Winter or Spring
GEOG 2700: Contemporary Environmental Issues <u>or</u>							
GEOG 2500: Sustainability and Human Society	4	qtr hrs					Variable
GEOG 2990: Prof. Development for Envi Sci Majors (Seniors only)	0	qtr hrs					Spring

**3. Bachelor of Science Electives (28+ quarter hours).** A minimum of 28 quarter hours from the following list of courses, including at least 8 hours in BIOL AND 8 hours in GEOG, GEOL, or ENVI. Other BIOL, GEOG, GEOL, ENVI classes not listed here may count for elective credit. No more than 5 quarter hours taken as Independent Study or Independent Research will be counted toward the minimum hours required in the major.

BIOL 2510	General Genetics	BIOL 3055	Ecology of the Rockies
BIOL 3030	Alpine Ecology	BIOL 3095	Global Change Ecology
BIOL 3035	Invasive Species Ecology	BIOL 3700	Advanced Topics in Ecology
BIOL 3044	Coral Reef Ecology	BIOL 3707	Topics in Conservation Biology
GEOG 2020	Computer Assisted Cartography #	GEOG 3425	Urban Sustainability *
GEOG 2100	Introduction to GIS #	GEOG 3440	Urban Transportation Planning *
GEOG 2410	Economic Geography *	GEOG 3445	Sustainability and Transportation *
GEOG 2420	Geography of Tourism *	GEOG 3500	Reconstructing Quaternary Environments *
GEOG 2550	Current Issues in Sustainability #	GEOG 3510	Biogeography *
GEOG 2700	Contemporary Environmental Issues #	GEOG 3520	Geography of Soils *
GEOG 3000	Advanced Geographic Statistics #	GEOG 3560	Fluvial Geomorphology *
GEOG 3010	Geographic Information Analysis #	GEOG 3600	Meteorology *
GEOG 3100	Geospatial Data *	GEOG 3610	Climatology *
GEOG 3130	GIS Programming with Python#	GEOG 3630	Dendroclimatology *
GEOG 3140	GIS Database Design #	GEOG 3720	Mountain Environments and Sustainability *
GEOG 3200	Remote Sensing #	GEOG 3755	Geographies of Health *
GEOG 3230	Advanced Remote Sensing *	GEOG 3800	Geography of Colorado *
GEOG 3310	Cult/Nature/Econ/Human Ecology #	GEOG 3870	Water Resources and Sustainability *
GEOG 3400	Urban Landscapes #	GEOG 3890	Ecological Economics *
GEOG 3410	Urban Applications of GIS *	GEOG 3940	Urban Geography Seminar +
GEOG 3420	Urban & Regional Planning #	GEOG 3955	Pollen Analysis Seminar *

# = offered every year

\* = offered every other year

+ = offered occasionally

GEOL 2020 Historical Geology  
 GEOL 2400 Geology and Ecology of the SW  
 GEOL 2800 Geology of National Parks  
 GEOL 3010 Process Geomorphology (aka GEOG 3910)

GEOL 3100 Environmental Geology  
 GEOL 3520 Erosion Process and Management  
 GEOL 3540 Groundwater Hydrology (aka GEOG 3530)

ENVI 2660 Natural History – Sonora & Baja  
 ENVI 3270 Environmental Impact Assessment

ENVI 2801 Water Quality of Western Rivers and Streams  
 ENVI 3550 Environmental Issues – Colorado

**CHEM 3410 Environmental Chemistry I Atmospheric**

**CHEM 3411 Environmental Chemistry II: Aquatic**

**NOTE:** A minor is **NOT** required for the B.S. degree.

**5. Minimum total quarter hours for degree:** 183 (75 hours must be upper-level: 2000 or 3000)

**6. Suggested Academic Plan** (Bachelor of Science Core Requirements are **bolded**)

<b>Year 1: Fall Quarter</b>	<b>Year 1: Winter Quarter</b>	<b>Year 1: Spring Quarter</b>
<b>Environmental Systems I</b> Foreign Language 1 First Year Seminar Common Curriculum Class	<b>Environmental Systems II</b> Foreign Language 2 First Year Writing and Rhetoric (WRIT) <b>Evolution Heredity &amp; Biodiversity</b>	<b>Environmental Systems III</b> Foreign Language 3 First Year Writing and Rhetoric (WRIT) <b>Physiological Systems</b>
<b>Year 2: Fall Quarter</b>	<b>Year 2: Winter Quarter</b>	<b>Year 2: Spring Quarter</b>
<b>General Ecology</b> <b>General Chemistry I</b> <b>Major Elective Class</b> Common Curriculum Class	Major Elective Class <b>General Chemistry II</b> <b>Contemporary Environmental Issues</b> Common Curriculum Class	Major Elective course <b>Environmental Chemistry</b> Common Curriculum Class
<b>Year 3: Fall Quarter</b>	<b>Year 3: Winter Quarter</b>	<b>Year 3: Spring Quarter</b>
Study Abroad or Field Quarter	<b>Calculus I</b> Major Elective courses Biology Elective course	<b>Calculus 2</b> <b>Environmental Law</b> <b>Statistics</b> Major Elective courses
<b>Year 4: Fall Quarter</b>	<b>Year 4: Winter Quarter</b>	<b>Year 4: Spring Quarter</b>
Major Electives courses <b>Physics I</b> Advanced Seminar/Common Curriculum	Major Elective courses <b>Physics II</b> Biology Elective course	Major Electives courses <b>Physics III</b>