

Advisors: Dr. Jessica Allen, Dr. Justin Bastow, Dr. Ross Black, Dr. Rebecca Brown, Dr. Camille McNeely, Dr. Robin O'Quinn, Dr. Jenifer Walke

(115 credits)

**Environmental Science Core Program and Option Requirements:**

**Environmental Science Required Courses (81-84 credits)**

ENVS 100 Introduction to Environmental Science	(5)
ECON 100 General Education Economics	(5)
GEOL 120 Physical Geology–The Solid Earth	(5)
GEOL 121 Physical Geology–Surficial Processes	(5)
CHEM 171 General Chemistry	(4)
CHEM 171L General Chemistry Lab	(1)
CHEM 172 General Chemistry	(4)
CHEM 172L General Chemistry Lab	(1)
CHEM 173 General Chemistry	(4)
CHEM 173L General Chemistry Lab	(1)
BIOL 171 Biology I	(5)
BIOL 172 Biology II	(5)
BIOL 173 Biology III	(5)
DSCI 245 Data Analysis for Business	(4)
<b>or</b> MATH 380 Elementary Probability and Statistics	
<b>or</b> BIOL 380 Data Analysis for Biologist*	(5)
BIOL 270 Biological Investigation	(3)
ENVS 300 Junior Seminar	(1)
GEOL 320 Environmental Geology	(4)
<b>or</b> GEOL 380 World Resources and Populations	(5)
GEOG 323 GIS for Environmental Science	(3)
DSCI 346 Advanced Data Analysis for Business	(4)
<b>or</b> BIOL 380 Data Analysis for Biologists*	(5)
<b>or</b> MATH 161 Calculus	(5)
ENVS 400 Senior Seminar	(1)
BIOL 440 Ecology	(4)
PLAN 431 Environmental Impact Statements	(3)
GEOL 470 Hydrogeology	(4)

*\*May only take once.*

**Degree Options–choose one of the three options for the BS.**

Students must satisfy course requirements in one of the following three subject areas:

- Environmental Biology,
- Environmental Chemistry,

or Environmental Geology

*Note that some course options may not result in there being 60 upper division credits required for graduation within the major. Advisor consultation is required.*

## **Environmental Biology: 30 credits**

### **Required General Biological Knowledge**

#### **Any one of the following (5 credits)**

BIOL 301 Microbiology	(5)
BIOL 302 Botany	(5)
BIOL 303 Invertebrate Zoology	(5)
BIOL 304 Vertebrate Zoology	(5)

#### **Capstone (5 credits)**

BIOL 490 Capstone	(5)
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#### **Electives (20)**

**20 credits of upper division electives with advisor's consent**

*Required environmental science credits*

*81-84 credits*

*General biological knowledge credits*

*30 credits*

*Minimum total credits for above emphasis*

*111 credits*

## **OPTION REQUIREMENTS:**

### **Environmental Chemistry (35-36)**

#### **All Required General Chemistry Courses (25 credits)**

CHEM 304 Quantitative Analysis	(6)
CHEM 319 Modern Inorganic Chemistry	(4)
CHEM 351 Organic Chemistry	(4)
CHEM 352 Organic Chemistry	(4)
CHEM 372 Organic Chemistry Lab I	(3)
CHEM 491 Senior Thesis	(4)

#### **Chemistry Elective, select one (5–6 credits)**

CHEM 353 Organic Chemistry	(3)
<b>and</b> CHEM 373 Organic Chemistry Lab II	(3)
CHEM 480 Biochemistry	(5)

#### **Required Geochemistry Course (5 credits)**

GEOL 463 Environmental Geochemistry	(5)
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*Required environmental science credits*

*81-84 credits*

*Required general chemistry credits*

*25 credits*

*Required geology credits*

*5 credits*

*Chemistry elective credits*  
*Minimum total credits for above emphasis*

*5–6 credits*  
*116 credits*

## **Environmental Geology**

### **All Required Geology Courses (34 credits)**

GEOL 122 Historical Geology	(5)
GEOL 311 Earth Materials	(4)
GEOL 360 Geologic Hazards	(4)
GEOL 411 Sedimentology and Stratigraphy	(4)
GEOL 462 Principles of Geochemistry	(5)
<b>or</b> GEOL 463 Environmental Geochemistry	(5)
GEOL 475 Engineering Geology: Soils	(4)

### **Capstone (4 credits)**

GEOL 490 Water in the West	(4)
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### **Electives (4)**

**4 credits of upper division electives with advisor's consent**

*Required environmental science credits*

*81-84 credits*

*Required geology credits*

*34 credits*

*Minimum total credits for above emphasis*

*115 credits*

*Biology ETS Field Exam required for graduation.*

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