# B.S. Environmental Science: Biology Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Biology is 2.0.

# Required Environmental Science Core Courses – 20 to 21 credits

A grade of C or better for BIOL 104 is required to be counted as a prerequisite.

EVSC 100 Introduction to Environmental Science (3 credits)

EVSC 210 Environmental Geology (3 credits)

EVSC 220 Environmental Analysis (3 credits)

EVSC 222 Environmental Biology or BIOL 244 Ecology (3/4 credits)

ENVS 270 Applied Environmental Science (3 credits)

GEOG 274 Intro. to Geographic Information Systems (3 credits)

EVSC 380 Senior Seminar (2 credits)

# Required Biology Track Courses – 24 credits

BIOL 104 Principles of Biology (4 credits) (must earn a C or better)

BIOL 106 Introduction to Zoology (4 credits)

BIOL 108 Introduction to Botany (4 credits)

BIOL 224 Applied Environmental Microbiology (3 credits)

Advanced Plant Course (3 credits)

Advanced Animal Course (3 credits)

Advanced Ecology (3 credits)

# Other Required Courses - 14 to 15 credits

CHEM 102 General Chemistry II (4 credits)

CHEM 204 Fundamentals of Organic Chemistry (4 credits)

GEOG 10 Planet Earth Users Guide: Intro to Physical Geography (3 credits)

MATH 106 Trigonometry (3 credits) or MATH 115 Precalculus (3 credits) or MATH 181 Calculus I (4 credits)

## **Directed General Education Courses – 11 credits**

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

CHEM 100 General Chemistry I – Category C1 (4 credits)

GEOL 100 Physical Geology – Category C2 (3 credits)

PHYS 40 General Physics I or PHYS 100 Physics I – Category C3 (4 credits)

# University Electives – 15 to 17 credits

Program Plan Code: BS\_EVSC\_BIOL

Effective Date: Fall 2024

#### Student Name:

#### Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Biology is 2.0.

Required Environmental Science Core Courses - 20 to 21 credits

EVSC 100 Introduction to Environmental Science	3 credits	Grade:
EVSC 210 Environmental Geology	3 credits	Grade:
EVSC 220 Environmental Analysis	3 credits	Grade:
EVSC 222 Environmental Biology <i>or</i>	3-4 credits	Grade:
BIOL 244 Ecology		
EVSC 270 Applied Environmental Science	3 credits	Grade:
GEOG 274 Introduction to Geographic Information Systems	3 credits	Grade:
EVSC 380 Senior Seminar	2 credits	Grade:
Total Credits	20-21 total credits	

Biology Track Courses - 24 credits

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BIOL 104 Principles of Biology (must earn a C or better)	4 credits	Grade:
BIOL 106 Introduction to Zoology	4 credits	Grade:
BIOL 108 Introduction to Botany	4 credits	Grade:
BIOL 224 Applied Environmental Microbiology	3 credits	Grade:
Advanced Plant Course:	3 credits	Grade:
Advanced Animal Course:	3 credits	Grade:
Advance Ecology Course:	3 credits	Grade:
Total Credits	24 total credits	

Other Required Courses - 14 to 15 credits

CHEM 102 General Chemistry II	4 credits	Grade:
CHEM 204 Fundamentals of Organic Chemistry	4 credits	Grade:
GEOG 010 Planet Earth Users Guide: Intro to Physical	3 credits	Grade:
Geography		
MATH 106 Trigonometry (3 credits) or	3-4 credits	Grade:
MATH 115 Precalculus (3 credits) or		
MATH 181 Calculus I (4 credits)		
Total Credits	14-15 total credits	

#### **Directed General Education Courses**

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

CHEM 100 General Chemistry I (Category C1)	4 credits	Grade:
GEOL 100 Physical Geology (Category C2)	3 credits	Grade:
PHYS 40 General Physics I	3-4 credits	Grade
or PHYS 100 Physics I (Category C3)		

University Electives – 15 to 17 credits

Course 1:	credits	Grade:
Course 2:	credits	Grade:
Course 3:	credits	Grade:
Course 4:	credits	Grade:
Course 5:	credits	Grade:
Total Credits	15-17 total credits	

**Summary of Graduation Requirements** 

Total credits from major courses	58
Total credits from general education program	45
Total credits from University Electives	17
Minimum total credits to graduate	120
Minimum overall GPA	2.0
Minimum GPA in major program	2.0

Program Plan Code: BS\_EVSC\_BIOL Effective Date: Fall 2024

## Student Name: Student ID Number:

Notes: Each semester listed below provides information including course categories, typical credit hours (CH.), and space to add specific course selections. This planner is only a suggested path. Consult with your program advisor regarding your unique plans and interests as you make choices about your schedule.

#### First Semester Plan

Gen Ed	GEOG 10	3 CH.	Selection:
Major	MATH 106	3 CH.	Selection:
Major	EVSC 100	3 CH.	Selection:
Major	BIOL 104	4 CH.	Selection:
Total		13 CH.	

#### Second Semester Plan

Gen Ed	Category A1	3 CH.	Selection:
Gen Ed	GEOL 100 (Category C2)	4 CH.	Selection:
Gen Ed	FYSM 100	3 CH.	Selection: FYSM 100
Major	BIOL 106	4 CH.	Selection:
Total		14 CH.	

## Third Semester Plan

Gen Ed	CHEM 100 (Category C1)	4 CH.	Selection:
Major	Advanced Plant, Animal, <i>or</i>	3 CH.	Selection:
	Ecology Course		
Major	GEOG 274	3 CH.	Selection:
Major	BIOL 108	4 CH.	Selection:
Total		14 CH.	

#### Fourth Semester Plan

Total		16 CH.	
Major	EVSC 222	3 CH.	Selection:
Major	EVSC 210	3 CH.	Selection:
Major	CHEM 102	4 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Gen Ed	COST 10 (Category A3)	3 CH.	Selection:

## Fifth Semester Plan

Gen Ed	Category A2	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Major	Advanced Plant, Animal, <i>or</i>	3 CH.	Selection:
	Ecology Course		
Major	CHEM 204 or 214	4 CH.	Selection:
Major	EVSC 224	3 CH.	Selection:
Total		16 CH.	

#### Sixth Semester Plan

Gen Ed	Category A4	3 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Elective	University Elective	4 CH.	Selection:
Major	BIOL 200/300-level	3 CH.	Selection:
	or EVSC 300-level Elective		
Major	EVSC 220	3 CH.	Selection:
Total		16 CH.	

## Seventh Semester Plan

Gen Ed	Category B	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	Advanced Plant, Animal, <i>or</i>	3 CH.	Selection:
	Ecology Course		
Gen Ed	PHYS 40 <i>or</i> PHYS 100	4 CH.	Selection:
	(Category C3)		
Total		16 CH.	

Eighth Semester Plan

Gen Ed	Category D	3 CH.	Selection:
Elective	University Elective	4 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Major	EVSC 380 Senior Seminar	2 CH.	Selection:
Total		15 CH.	

#### Additional Notes:

Choice of courses made with advisor from a list maintained by Environmental Science Program Committee. A grade of "C" or better for BIOL 104 is required to be counted as a prerequisite.

University electives are recommended to be used for completing 1 or 2 minors in BIOL, CHEM, GEOG, or GEOL

Students may be at a different level of math, depending on ALEKS Placement Score

Program Plan Code: BS\_EVSC\_BIOL

Effective Date: Spring 2020