

# LAFAYETTE COLLEGE

*The Programs in Environmental Science and Environmental Studies*

## The Environmental Science Major (**CLASS OF 2026 FORWARD**)

The Environmental Science major requires students to take a total of 20 courses, 14 of which have an environmental focus and 6 of which are background science courses. Of the 14 environmentally focused courses, 6 are required core science courses. Additionally, students are to take two environmental studies courses and 6 courses in their environmental concentration area/track (Restoration Ecology **or** Hydrology and Aquatic Systems **or** Energy Resources)

**F** – typically offered in the Fall semester

**S** – typically offered in the Spring semester

**B** – typically offered in both semesters

This notation is not a guarantee that the course is offered in the indicated semester. Please consult the Course Schedule listing on the [Office of the Registrar's Website](#).

\* denotes courses that have prerequisites

### Science Background Courses (6 courses):

CHEM 121 **B**, 122\* - **S**

Math 161, 162\* - **B**

Math 186\* - **B**

Physics 111\*/131\* **or** BIOL 111 – **F** (students in the Restoration Ecology track should take BIOL 111)

<u>Course</u>	<u>Term Taken</u>

**Environmental Science Core (6 courses):**EVST 100 An Introduction to the Environment - **F**BIOL 233 Environmental Problem Solving in Biology\* - **F or** BIOL 234 Environmental Biology\* - **S or** BIOL 272 Conservation Biology\* - **F**CHEM 252 Environmental Chemistry\*- **F or** CE 321 Introduction to Environmental Engineering and Science\*- **F**GEOL 110 Environmental Geology - **S or** GEOL 120 Geologic Disasters: Agents of Chaos - **F**EVST 290 Climate Change the Facts, the issues, the Long-Term View\* - **S or** GEOL 115 Earth: Evolution of a Habitable Planet - **F**EVST 400 Environmental Studies Praxis – **F** (normally)

<u>Course</u>	<u>Term Taken</u>

**Environmental Studies Core (2 courses)**EVST 215 Environmental Policy\* - **F**EVST 253 Environmental Justice\* - **S**

<u>Course</u>	<u>Term Taken</u>

**Concentration Areas/Tracks: (6 courses in concentration area)****(1) Restoration Ecology OR (2) Hydrology & Aquatic Systems OR (3) Energy Resources****(1) Restoration Ecology Concentration (6 courses)****(Note: students pursuing this track cannot double count BIOL 272 as a required course and a core science course)****Required courses**BIOL 231 Ecology\* - **S or** BIOL 342 Restoration Ecology\* - **B**BIOL 272 Conservation Biology\* - **F**GEOL 300 Earth Surface Processes\* - **S**

**Elective courses (In addition to the three required courses above, students must take any 3 courses from the list below)**

BIOL 215 Phytopathology\* - F  
 BIOL 224 Plant Form, Function, and Adaption\* - S  
 BIOL 225 Microbiology\* **Every 3rd semester**  
 BIOL 275 Behavioral Ecology\* S  
 BIOL 332 Advanced Aquatic Ecology\* F  
 BIOL 342 Restoration Ecology\* F  
 CE 351 Water Resources Engineering\* - S  
 CE/EVSC 352 Hydrology\* - F  
 CE/EVSC 322 Environmental Site Assessment\* - S  
 CE 423 Water Quality \* - S – **odd years**  
 CE 425 Water Supply and Pollution Control\* - S – **odd years**  
 CE 451 Open Channel Flow\* - S – **odd years**  
 EVSC/GEOL 211 Rivers and Watersheds: Form and Function\*  
 GEOL 205 Oceanography\* - S  
 GEOL 210 Hydrogeology\* - F  
 GEOL 229 Geographical Information Systems and Remote Sensing in Geosciences\* - F  
 GEOL 300 Earth Surface Processes\* - S  
 GEOL 321 Geochemistry\* - S **even years**

<u>Course</u>	<u>Term Taken</u>

**(2) Hydrology and Aquatic Systems Concentration (6 courses)**

**Required (at least one from each set)**

Groundwater course (GEOL 210\* - F)  
 Surface water course (GEOL 300 - S or CE/EVSC 352\* or CE 351\* - S)  
 Aquatic biology course (BIOL 231\*- S or BIOL 332\*- F **every other year** or BIOL 341\* - F)

**Elective courses (In addition to three required courses selected above, students must take any 3 courses from the list below)**

BIOL 231 Ecology\* S  
 BIOL 332 Advanced Aquatic Ecology\* F – **odd years**  
 BIOL 342 Restoration Ecology\* F  
 CE 321 Introduction to Environmental Engineering and Science\* F

CE 351 Water Resources Engineering\* **S**  
 CE/EVSC 352 Hydrology\* **F**  
 CE 423 Water Quality\* **S**  
 CE 425 Water Supply and Pollution Control\* **S**  
 CE 451 Open Channel Flow\* **S**  
 CHE 211 Material and Energy Balances\* **F**  
 CHEM 231 Analytical CHEM I\* **F**  
 CHEM 252 Environmental Chemistry\* **F**  
 EVSC/GEOL 211 Rivers and Watersheds: Form and Function\*  
 GEOL 205 Oceanography\* **S**  
 GEOL 229 Geographical Information Systems and Remote Sensing in Geosciences\* **F**  
 GEOL 300 Earth Surface Processes\* **S**  
 GEOL 315 Paleoclimatology and Paleooceanography\* **S**  
 GEOL 321 Geochemistry\* **S**  
 GEOL 322/CE464 Environmental Geophysics\*

<u>Course</u>	<u>Term Taken</u>

### **(3) Energy Resources Concentration (6 courses)**

#### **Required**

CHE 211 Material and Energy Balances\* - **F**  
 EGRS 352 Energy, Technology, and the Modern World\* - **S**  
 Thermodynamics (CHE 222\* **or** ME 354\*) – **F (both courses)**

#### **Elective courses (In addition to the three required courses selected above, students must take any 3 courses from the list below)**

Fluid Mechanics (CE251\*- **F** **or** ME 362\* - **S**)  
 CE/EVSC 352 Hydrology\* **F**  
 CE 351 Water Resources Engineering\* - **S**  
 CHE 311 Transport Phenomena\*- **F**  
 CHE 342 Atmospheric Engineering and Science\*  
 CHE 370 Alternative Energy Resources\*- **S**  
 GEOL 215 Modern and Ancient Depositional Environments\*- **S**  
 GEOL 229 Geographical Information Systems and Remote Sensing in Geosciences\*- **F**  
 GEOL 317 Tectonics and Structure of the Earth\*- **F**

GEOL 322/CE 464 Environmental Geophysics\*- **S**

ME 470 Heat Transfer\*- **F**

ME 475 Thermal/Fluids Systems\*- **S**

ME 483 Power Plants\*- **no regular cycle**

<u>Course</u>	<u>Term Taken</u>