# ECOLOGY AND ENVIRONMENTAL BIOLOGY, TERRESTRIAL - CERTIFICATE



#### **EBAC**

The Environmental Biology certificate is designed for the student who wants to enter the Environment and Sustainability workforce with a solid knowledge and skills in terrestrial ecology and environmental biology. Students will experience the Rhode Island environment and ecology in hands-on laboratory settings that take them into the field, in addition to learning theory and experimental methods in the classroom. Students will learn about insects, soil, geology, plants, and trees and the interaction of all of these in the greater environment.

Upon completion of the certificate, students may elect to complete another certificate in Environmental Biology or pursue a Business Certificate. Students may also continue their education by applying all courses to the completion of the Environment, Sustainability, and Management Associate of Science degree.

### **Program Learning Outcomes**

#### Upon completion of this program, a student will be able to:

- 1. Discuss the structure, function, and relationships of environmental systems such as the Earth, life, and climate
- 2. Demonstrate knowledge of the terrestrial environment through observation, experimentation, and inference through testable hypotheses, collecting data, and analyzing data.
- 3. Apply quantitative reasoning to make logical interpretations of complex problems in nature.
- Communicate clearly and effectively through oral and written presentations.

### **Certificate Requirements**

Code BIOL 1001	<b>Title</b> Introductory Biology: Organismal MSCI; Critical Thinking; Social and Professional Responsibilities	Hours 4
BIOL 1050	Humans and the Environment MSCI; Written Communication; Critical Thinking	3
BIOL 2025	Biology of Trees and Shrubs	4
BIOL 2410	Biology of Insects	4
BIOL 2420	Introduction to Soil Science	4
GEOL 1010	Introduction to Geology - How the Earth Works MSCI; Critical Thinking; Scientific Reasoning	4
Total Hours		23

## **Recommended Course Sequence**

Course Year 1	Title	Hours
Semester 1		
BIOL 1001	Introductory Biology: Organismal	4
BIOL 1050	Humans and the Environment	3

BIOL 2410	Biology of Insects (Fall only)	4
	Hours	11
Semester 2		
BIOL 2025	Biology of Trees and Shrubs (Spring only)	4
BIOL 2420	Introduction to Soil Science (Spring only)	4
GEOL 1010	Introduction to Geology - How the Earth Works	4
	Hours	12
	Total Hours	23