# ECOLOGY AND ENVIRONMENTAL BIOLOGY, AQUATIC - CERTIFICATE



### EBTC

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 aquatic 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 sustainable aquatic food systems, marine systems, earth systems, 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. Identify and discuss the socioeconomic impacts of human use of aquatic environments.
- 2. Discuss the structure, function, and relationships of environmental systems such as the Earth, life, and climate
- 3. Demonstrate knowledge of the aquatic environment through observation, experimentation, and inference through testable hypotheses, collecting data, and analyzing data.
- 4. Apply quantitative reasoning to make logical interpretations of complex problems in nature.
- 5. Communicate clearly and effectively through oral and written presentations.

### **Certificate Requirements**

Code	Title	Hours
BIOL 1001	Introductory Biology: Organismal <sup>MSCI;</sup> Critical Thinking; Social and Professional Responsibilities	4
BIOL 1050	Humans and the Environment <sup>MSCI;</sup> Written Communication; Critical Thinking	3
BIOL 1060	Introduction to Permaculture	4
BIOL 2130	Food from the Sea	3
GEOL 1010	Introduction to Geology - How the Earth Works MSCI; Critical Thinking; Scientific Reasoning	4
OCEN 1040	Introduction to Oceanography (Formerly OCEN 1010 and 1030) Literacy	4
Total Hours		22

## **Recommended Course Sequence**

Course	Title	Hours
Year 1		
Semester 1		
BIOL 1001	Introductory Biology: Organismal	4
BIOL 1060	Introduction to Permaculture (Fall only)	4
BIOL 2130	Food from the Sea (Fall only)	3
	Hours	11
Semester 2		
BIOL 1050	Humans and the Environment	3
GEOL 1010	Introduction to Geology - How the Earth Works	4
OCEN 1040	Introduction to Oceanography (Formerly OCEN 1010 and 1030)	4
	Hours	11
	Total Hours	22