Environmental Science

Degree Type

Associate in Science

The Environmental Science Degree is intended for students who wish to transfer to a four-year institution, to pursue a degree in environmental studies, environmental policy, environmental science, ecology, natural resources management, or related fields. It is configured as a diverse environmental science foundation and is designed to provide a solid scientific and social scientific substance for students with a broad range of interests related to the environment. The degree of Associate in Science with a major in Environmental Science will be awarded upon completion of all requirements.

Program Outcomes

Students graduating with the A.S. degree in Environmental Science will be able to:

- Understand general ecological laws and principles regarding the systemic nature of the planet.
- Understand and be able to execute a wide variety of laboratory and field science techniques in Environmental Science, Chemistry, and Biology.
- Understand the holistic nature of environmental issues stemming from anthropogenic sources, geological sources, biological sources, and the biogeochemistry of the Earth.
- Understand and integrate the selected sub-disciplines of environmental science and environmental studies at a more advanced undergraduate level.
- Understand and appreciate the overlap of science, public policy, and ethics when exploring environmental and social issues.
- Use critical thinking and critical inquiry to analyze and explore ethical, scientific, and policy issues in environmental science.
- Employ aforementioned skills to analyze, interpret, and explain scientific data regarding the systems of the earth and be able to present conclusions in formal writing and presentations.
- Qualify for transfer to a four-year college or university.

Technical Standards

Students enrolling in the A.S. Degree in Environmental Science must, in addition to meeting the specific prerequisite requirements for each course, meet the following general, technical standards:

- Students must be able to comprehend the English language, both oral and written, and must have sufficient manual dexterity to produce legible written documents in a timely manner.
- Students must be able to sit or stand at a desk/laboratory bench, and also be able to conduct work in the field.
- Students must possess the necessary focus to stay on task for extended periods of time.
- Students must be able to comprehend and follow instructions in the classroom and laboratory in a timely manner.
- Students must possess the necessary manual dexterity to carry out assigned laboratory and field work tasks.
- Students must be able to perform required classroom, field and laboratory operations, including mathematical operations, without reference to notes, as directed.

Transfer Credit Policy

In addition to Great Bay transfer credit policies, transfer of courses more than ten years old will be evaluated by the department chair or program coordinator on an individual basis.

First Year

Fall Semester

Item #	Title	Theory Hours	Lab Hours	Credits
	ENGL110G/111G	4	0	4-5
	MATH150G/152G (Envi Science)	4	0	4-5
SOCI120G	Society and Technological Change	3	0	3
BIOL109G	General Biology II	3	3	4
	Sub-Total Credits	14	3-5	15-17

Spring Semester

Item #	Title	Theory Hours	Lab Hours	Credits
CHEM115G	General Chemistry I	3	3	4
NATR105G	Sustainable Agriculture & Food Systems	3	2	4
ENGL214G	Introduction to Creative Nonfiction	3	0	3
BTEC205G	Bioethics	3	0	3
	Open Elective*	3	0	3
	Sub-Total Credits	15	5	17

Second Year

Fall Semester

Item #	Title	Theory Hours	Lab Hours	Credits
BIOL160G	Introduction to Environmental Science	3	3	4
BIOL230G	General Ecology	3	3	4
MATH210G	Pre-Calculus	4	0	4
	Social Science Elective*	3	0	3-4
	Sub-Total Credits	13-14	6	15-16

<u>MATH210G</u>: Students intending to transfer should select courses that will transfer appropriately to their intended institution.

Spring Semester

Item #	Title	Theory Hours	Lab Hours	Credits
NATR299G	Contemporary Conservation Issues and	3	3	4
	Environmental Awareness			
CHEM116G	General Chemistry II	3	3	4
	Humanities/Fine Arts Elective*	3	0	3
	Open Elective*	3	0	3
	Sub-Total Credits	12	6	14

Students with appropriate test scores may substitute a higher-level course from the direct calculus math pathway: MATH210G, MATH230G, MATH235G, MATH250G.

Total Credits	61-64