



Introduction to Environmental Science
ES 0110
3 credits

Description: This course is an interdisciplinary study that presents a general overview of how nature works and how earth and life systems, including society, are interconnected. It examines how the environment is being used and abused by humans and what individuals can do to protect and improve it for future generations and for other living things.

Prerequisite: None

Textbook: There are many suitable textbooks for this course, including open source assets such as: [AP Environmental Science](#) and [Introduction to Environmental Science: 2nd edition](#). Other textbooks will be considered by the faculty liaison on case-by-case basis.

The following topics should be covered in this course:

1. Aspects of the Physical Earth: Matter and Energy, Geology and Plate Tectonics, Atmospheric structure, Elements of the biosphere
2. Aspects of Anthropogenic influence on Earth Systems: Population and demographic transition, energy and climate, land use (mining, grazing, agriculture, forestry, desertification), water use (sedimentation, eutrophication)
3. Aspects of the built environment: pollution and environmental remediation, economics and decision-making, policy and culture

Course objectives: Students will gain an understanding of:

- the natural composition of the earth, natural cycles of matter and energy, and the interaction between biological components.
- the history and current impacts of human life on planet earth including land use, water use, pollution and climate change.
- human feedbacks into environmental conditions, specifically the interaction between economy, culture, technology and policy.

Grading: The final grade will be determined using a variety of assessment methods including exams, homework and class participation.

Pitt Grading System:

All courses required to satisfy associate and baccalaureate degree requirements- including all courses required for a major, a minor, or general education- must be taken for letter grades, with the exception of those courses designated as graded S and NC only. Pitt-Bradford uses 13 earned letter grades. They are listed below with their equivalent quality point values.

A+	4.00
A	4.00 superior achievement
A-	3.75
B+	3.25
B	3.00 meritorious achievement
B-	2.75
C+	2.25
C	2.00 adequate achievement
C-	1.75
D+	1.25
D	1.00 minimal achievement
F	0.00 failure

Academic Integrity and Plagiarism: Members of a university community, both faculty and students, bear a serious responsibility to uphold personal and professional integrity and to maintain complete honesty in all academic work. Violations of the code of academic integrity are not tolerated. Students who cheat or plagiarize or who otherwise take improper advantage of the work of others face harsh penalties, including permanent dismissal. The academic integrity guidelines set forth student and faculty obligations and the means of enforcing regulations and addressing grievances.

Grades: Grade criteria in the high school course may be different from the University standards. A CHS student could receive two course grades, one for high school and one for the University transcript. In most cases, the grades are the same. Grading standards should be explained at the beginning of the course.

Transfer Credits: Grades earned in CHS courses appear on an official University of Pittsburgh transcript and the course credits may be eligible for transfer to other colleges and universities. Students should contact potential colleges and universities in advance to be sure their CHS credits will be accepted. If students will attend any University of Pittsburgh campus, grade earned in the course will count toward the student grade point average at the University. At the University of Pittsburgh, the CHS course supersedes any equivalent AP credit.

Drops and Withdrawals: Students should monitor their progress in a course. A CHS teacher can contact the program administrators to request a drop or withdrawal. Dropping or withdrawing from the CHS course has no effect on enrollment in the high school credits.