

Environmental Economics

Last Updated: Fri, 01/02/2026

Course prefix: ECON

Course number: 4440

Section: DB

CRN (you may add up to five):
30237 35343

Instructor First Name: Dylan

Instructor Last Name: Brewer

Semester: Spring

Academic year: 2026

Course description:

Is economic growth compatible with environmental quality? This course discusses how economic behavior impacts and is impacted by the environment. We discuss how to design policies that promote economically and environmentally sustainable communities such as pollution pricing and property-rights approaches. In addition, we discuss how communities can manage environmental commons problems by relying on local knowledge, norms, and institutions. At the end of the course, students analyze data related to an environmental policy change, applying basic econometric techniques for program evaluation.

Course learning outcomes:

The top-level learning objective for this course is for students to develop a critical understanding of the tradeoffs between consumption of dirty goods and environmental amenities. Inherent in this is an understanding of the consequences of command-and-control environmental policies, market-based environmental policies, local governance approaches, and non-intervention. By the end of the semester, students will be comfortable using mathematical models of firm and individual behavior as a framework for analyzing a broad range of environmental problems. In addition, students will be able to apply canonical conceptual models from economics to environmental problems in new contexts. Finally, students will be able to use econometric techniques to analyze the effects of environmental policies on economic outcomes.

Required course materials:

There is no textbook needed for purchase. I have written a textbook for the course that I will post online. Readings will also be provided online when applicable.

Grading policy:

There are 600 possible points in the course. Your final grade is calculated as the total number of points you earn (including extra credit), divided by 600.

Points Breakdown

- Participation grade: 50 points
- Reading quizzes: 90 points
- Homework assignments: 160 points
- Midterm exam: 150 points
- Final exam: 150 points
- Podcast and CLOS extra credit: up to 20 points

Total possible points: 600

Letter Grade Conversion (Georgia Tech Scale)

- **A (4.0 - Excellent):** 90.00%–100.00%
- **B (3.0 - Good):** 80.00%–89.99%
- **C (2.0 - Satisfactory):** 70.00%–79.99%
- **D (1.0 - Passing):** 60.00%–69.99%
- **F (0.0 - Failure):** below 60.00%

Attendance policy:

Attendance is key for success in this class. I will not keep track of attendance; however, participation is part of the course grade and there are in-class quizzes. In previous years, students who skipped class learned less and consistently performed worse on exams. I strongly encourage students to attend every class.

Please arrive on time for class and avoid leaving class early. If this cannot be avoided on a given class day, please communicate with the instructor beforehand. Students who disrupt class by arriving late and leaving early may have their participation grade penalized.

Academic honesty/integrity statement:

"I commit to uphold the ideals of honor and integrity by refusing to betray the trust bestowed upon me as a member of the Georgia Tech community."

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <https://policylibrary.gatech.edu/student-life/academic-honor-code>. Academic integrity is extremely important to me.

Any student suspected of cheating or plagiarizing on an exam or assignment will be reported to the Office of Student Integrity, which will investigate the incident and identify the appropriate penalty for violations.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the Social Sciences area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I understand human experiences and connections?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze the complexity of human behavior, and how historical, economic, political, social, or geographic relationships develop, persist, or change.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Intercultural Competence
- Perspective-Taking
- Persuasion