

Econ 4545: Environmental Economics

Department of Economics
University of Colorado Boulder
Prof. Stephanie Weber

Fall 2025

Email: stephanie.m.weber@colorado.edu
Office Hours: T/W 2-3 pm
Office: Economics 112

Class website: Canvas
Class Hours: T/Th 11 am - 12:15 pm
Class location: Economics 117

Course overview

This class provides an introduction to environmental economics, with a focus on how economic tools help us understand and address environmental problems. The course will cover: why environmental problems arise, using the theory of externalities and the theory of public goods; the economic tools available to correct these market failures; how to evaluate alternative environmental policies and value improvements to the environment; and the real-world environmental policy landscape in the US and internationally, including how regulations have sought to address different pollutants and sources of pollution.

Course materials

The textbook is *Environmental Economics and Management: Theory, Policy and Applications*, by Scott J. Callan and Janet M. Thomas, 2010 (6th edition). This textbook provides an excellent introduction to the economic concepts in environmental economics. In the syllabus, readings from this book will be denoted "C&T."

Supplementary readings will occasionally be posted on Canvas with a course announcement. Be prepared to discuss these readings in class.

All lecture slides for the course will also be made available on Canvas, at least one day in advance. Solutions to in-class practice problems and iClicker questions will be posted separately.

Grading

Course grades will be based on the following breakdown:

10% class participation (iClicker questions, in-class discussions)
15% problem sets
22.5% midterm 1
22.5% midterm 2
30% final exam

Course attendance and participation

Attendance and participation are expected, though attendance will not be taken. Please make an effort to attend class every day. If you do miss class, it is your responsibility to get notes from a classmate.

A big part of class participation will be in-class iClicker questions. We will be using iClicker to enhance active learning and participation in my course. You will need to have an iClicker student app account, [register your clicker there](#), and download and set up the app BEFORE you get to class. Students are able to check their clicker score throughout the semester and are responsible for ensuring that their clicker answers are recorded.

Problem sets

The problem sets will require direct application of concepts discussed in class as well as asking students to apply these concepts to new problems. Students are encouraged to work in small groups to discuss strategies for solving problems. However, write ups must be done independently. The problem sets are due via Canvas by midnight on the due date. Problem sets must be combined into a single document – problem sets submitted in multiple files will lose 5% of total possible points. Late problem sets will lose 20% of total possible points for each day late before the solutions are posted, and after 5 days, the problem set will receive 0.

Because of the long waitlist, completion of the first problem set is mandatory. Any student who does not submit the first problem set on time may be administratively dropped from the class.

Examinations

There will be two in-class midterms and a final exam. The midterm exams will be held on **Thursday, Oct. 2** and **Tuesday, Nov. 4** during class. The final exam will be held on **Thursday, Dec. 11** from 10:30 am - 1 pm. If you anticipate a conflict with these dates, please reach out immediately.

Grading policy

The grade distribution will be consistent with other upper-level economics electives. You may make an appointment to discuss your grade at any point during the course. However, I will not discuss strategies to improve your grade after the final exam.

Schedule

The four units for the class are listed below. I expect to spend 2-3 weeks on each unit. For each section, the textbook readings are posted. Supplemental readings will be posted on Canvas.

Unit I. Introduction/review of key economic concepts.

C&T Ch. 1-2

Unit II. Environmental market failures and policy solutions.

C&T Ch. 3-5

Unit III. Benefit-cost analysis.

C&T Ch. 7-9

Unit IV. Real-world environmental policy.

C&T Ch. 10-14

Campus Policies

Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the [Honor Code](#). Violations of the Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. Understanding the course's syllabus is a vital part in adhering to the Honor Code.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: StudentConduct@colorado.edu. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit [Honor Code](#) for more information on the academic integrity policy.

AI Policy

Copying or paraphrasing outputs from ChatGPT or other large language models is not permitted, in the same way that copying or paraphrasing from your classmate's assignment is not permitted. Because grammar and writing quality are not assessed on problem sets, students should have no need to use tools like Grammarly. While AI detection tools are flawed, if your work raises concerns, I will schedule a meeting with you to review it. If you cannot explain your work, the assignment will receive a zero.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website. If you have a temporary illness, injury or required medical isolation for which you require adjustment, a simple email to me will suffice.

Accommodation for Religious Obligations

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in a timely manner. In this class, please reach out immediately if you anticipate conflicts with the midterm or final exams. See the [campus policy regarding religious observances](#) for full details.

Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information does not always align with how they identify. If you wish to have your preferred name (rather than your legal name) and/or your preferred pronouns appear on your instructors' class rosters and in Canvas, visit the [Registrar's website](#) for instructions on how to change your personal information in university systems.

Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, marital status, political affiliation, or political philosophy.

Additional classroom behavior information

- [Student Classroom and Course-Related Behavior Policy](#).
- [Student Code of Conduct](#).
- [Office of Institutional Equity and Compliance](#).

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits [protected-class](#) discrimination and harassment, sexual

misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who believe they have been subjected to misconduct can contact OIEC at 303-492-2127 or email OIEC@colorado.edu. Information about university policies, [reporting options](#), and [OIEC support resources](#) can be found on the [OIEC website](#).

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive an outreach from OIEC about their options for addressing a concern and the support resources available. To learn more about reporting and support resources for a variety of issues, visit the [Don't Ignore It page](#).

Mental Health and Wellness

The University of Colorado Boulder is committed to the well-being of all students. If you are struggling with personal stressors, mental health or substance use concerns that are impacting academic or daily life, please contact [Counseling and Psychiatric Services \(CAPS\)](#) located in C4C or call (303) 492-2277, 24/7.