

ECON 3545: Environmental Economics

Spring 2026

Instructor: Liaoyuan (Leo) Zhang

Office: Econ 309c

Class Time and Location: MWF 9:05–9:55 PM; Miramontes Baca Education Bldg 157

Office Hours: MW 3:00–4:30 PM

TA: Seungmin Baek

Office: ECON 304

Office Hours:

Course Description

Highlights causes of excessive environmental pollution and tools for controlling it through economic analysis, values of preservation and distribution of costs and benefits.

Prerequisites

- **Economics Prerequisites:** ECON 2010
- **Mathematics Prerequisites (Not mandatory but recommend):** Calculus. Either the combination (ECON 1078 AND ECON 1088) or MATH 1081 or the combination (MATH 1080, MATH 1090 and MATH 1100)

Course Material

The textbook is *A Course in Environmental Economics* by Phaneuf and Requate, published by Cambridge University Press.

The exercises in the book are very important for you to review concepts and solve problems but not mandatory for grading purpose (It could show up on in-class quiz though). You are recommended to read through the materials before the next topic starts.

Grading

Grades are based on in-class quizzes (15%), attendance (15%), midterm exam 1 (20%), midterm exam 2 (20%), and the final exam (30%). No makeup exams will be given. If there is a proven emergency situation that causes you to miss an exam, your grade for your missed exam will be filled in by reweighing future exams (e.g., if you miss the second exam, I will reweigh the final).

There will be about 7 in-class quizzes, each of which will be based on the material from the current or previous class. The lowest score for in-class quizzes will be dropped in computing grades.

Attendance

Class attendance is mandatory and it accounts for 15% of your grade. There is only one excused absence for everyone. If you want to use it, you should send me an email and indicate clearly you want to use this opportunity (I suggest saving it for real emergency).

How to Study Effectively

I suggest that you read the related materials before each lecture, so that you are prepared. Take notes during the lecture. After each class, have a quick review within the same or next day. Try to get all the exercise questions (if there is one) for each class and each topic understand without delay.

Course Schedule

The course is arranged by topics, and each topic is usually covered over multiple lectures. Below is a tentative course schedule. There may be changes to this schedule during the semester, which will be announced in class. It is your responsibility to update course information according to the announcements made in class.

#	Topic
1	Externality
2	Theory of Environmental Policy
	EXAM 1 (Week 5): Friday, 2/13, at normal class time.
3	Imperfect Information and Damage Function
4	Competitive Market
	EXAM 2 (Week 10): Friday, 3/13, at normal class time.
	Spring Break: Week 11 (3/16–3/20).
5	Non-Competitive Market
6	Pre-existing Market Distortion
7	Compensating Variation and Equivalent Variation
	FINAL EXAM: Indicated on the Canvas page.

University Policies

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, political affiliation, or political philosophy.

For more information, see the classroom behavior policy, the Student Code of Conduct, and the Office of Institutional Equity and Compliance.

Requirements for Infectious Disease

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all applicable campus policies and public health guidelines to reduce the risk of spreading infectious diseases. If public health conditions require, the university may also invoke related requirements for student conduct and disability accommodation that will apply to this class.

If you feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the guidance of the Centers for Disease Control and Prevention (CDC) for isolation and testing. If you have been in close contact with someone who has COVID-19 but do not have any symptoms and have not tested positive for COVID-19, you do not need to stay home but should follow the guidance of the CDC for masking and testing.

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 required medical isolation for which you require adjustment, please notify me and the TA ASAP to allow for proper arrangements.

Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

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.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: honor@colorado.edu, 303-492-5550. 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.

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 have been subjected to misconduct can contact OIEC at 303-492-2127 or email cureport@colorado.edu. Information about university policies, reporting options, and support resources can be found on the OIEC website.

Please know that faculty and graduate instructors must 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 outreach from OIEC about resolution options and support resources. To learn more about reporting and support for a variety of concerns, visit the Don't Ignore It page.

Religious Accommodations

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 the first two weeks of the semester. See the campus policy regarding religious observances for full details.

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.

Free and unlimited telehealth is also available through Academic Live Care. The Academic Live Care site also provides information about additional wellness services on campus that are available to students.