ECON3545: Environmental Economics

Spring 2025

| Instructor: | Elizabeth Sorensen Montoya | Time: | MWF 9:05am-9:55am |
|-------------|--|---------------|-------------------|
| Email: | elizabeth.sorensenmontoya@colorado.edu | Place: | MBE 157 |
| Office: | ECON401* | Office Hours: | F 11:15am-1:15pm |

*This office is only accessible via a steep staircase. If this makes it difficult for you to access, please email me ahead of the day you would like to come to office hours and we can arrange a different meeting location.

Grader/Teaching Assistant: Dongkyu Yang Email: Dongkyu.Yang@colorado.edu Office: ECON 309B Office Hours: W 3-5pm

Prerequisites:

Students must have earned a grade of at least C- in Principles of Microeconomics (ECON2010) prior to taking this course.

Course Description:

This course explores environmental challenges from an economic perspective. In the first part of the course, we will examine the role of market failures, such as externalities and public goods, in shaping environmental issues and evaluate the economic tools available to address these challenges. We will learn the methods of environmental valuation and policy evaluation. In the second part of the course, we will apply these tools and methods to analyze real-world environmental issues and policies, fostering a deeper understanding of the economic approaches to solving complex environmental problems.

Tentative Course Outline:

We will cover the five main units below. We will typically spend 2-3 weeks on each unit, with more time dedicated to unit 2. Chapter readings (tentative) associated with each unit are given below. We will not always read the entire corresponding chapter, reading assignment details will given in class and in Canvas. Supplemental readings will also be available in Canvas. (*Note: "HSW" refers to our textbook.*

Unit 1: Introduction & Ten Key Insights from Economics

- Chapter 1, HSW

Unit 2: The Economic Approach (Market Failures & Policy Solutions)

- Chapters 2, 9, 10 HSW

Unit 3: Benefit-Cost Analysis

- Chapters 4 & 5, HSW

Unit 4: Real-world Environmental Policy

- Chapters 9, 10, 12, 15

Unit 5: Topics in Environmental Economics

- Dependent on time and student interest, topics may include: biodiversity loss, trade and the environment, waste and recycling, water policy

Communication:

- Announcements regarding any changes to the course schedule or homework due dates will be clearly communicated in lecture and posted on the course Canvas page.
- The best way to contact me is through the university email system. I do not check or respond to emails sent through the Canvas messaging system. Please use your ####@colorado.edu address for contacting me. This helps ensure that I do not miss any emails.

Course Materials:

1. Introduction to Environmental Economics by Nick Hanley, Jason Shogren, and Ben White

To keep the cost of your course materials as low as possible and access to those materials as convenient as possible, we have collaborated with the CU Book Store and the publisher to deliver those materials through a program called "Day 1 Digital Access", which will appear on your tuition and fee bill as "Day 1 Digital Access". What does this mean for you?

- (a) You will receive access to all your course materials, digitally, on the first day of classes through the course Canvas page.
- (b) You will see a "Day 1 Digital Access" charge on your tuition and fees. This is a guaranteed lowest price, discounted by the publisher, and not available outside this course.
- (c) You have the option to opt out. This means you won't pay for anything, but you will lose all access to the course materials, including the homework manager, Mindtap.
- (d) You can opt out by using a link in a reminder email you will receive with the subject heading "Day 1 Digital Access". You must opt out no later than January 29, 2025 otherwise you will be charged for the materials.

2. Other readings:

Certain topics involve lecture materials in place of or in addition to the Hanley, Shogren and White text. These materials will be provided on Canvas.

Grading:

Course grades are based on the following breakdown:

| Grade Item | Percentage |
|-------------------------|------------|
| In-class Participation | 10% |
| Problem Sets | 15% |
| Policy Analysis Project | 15% |
| Midterm 1 | 20% |
| Midterm 2 | 20% |
| Final Exam | 20% |

- Final grades are based on the percentage of possible points you earn in the course. I will round up to the next letter grade if you are at or within 0.5 percentage points of that grade.
- To maintain fairness, all grades will be determined with strict adherence to the policies listed in this syllabus. Individual requests for grade bumps or additional extra credit opportunities will be ignored, unless there are extreme extenuating circumstances approved by the University. This does not apply to requests to review grades if you believe an error in calculation has been made.

Course attendance and in-class participation:

Attendance and participation are expected, though attendance will not be taken. This course is largely discussion-based, and your active engagement is essential for creating a meaningful learning experience. Your participation grade will be based on your contributions to these discussions as well as your involvement in frequent, in-class activities, such as short written reflections, responses to in-class questions, and collaborative exercises. While attendance is not tracked, it will be difficult to perform well in this grade category—and in the course overall—without regular attendance.

Problem Sets:

Problem sets will be assigned in most weeks and completed via Canvas. Notice of problem set due dates will be given well in advance in lecture and through Canvas announcements. These problem sets will involve the direct application of concepts discussed in class. You are welcome to work on these problem sets in small groups, but a unique submission is required of each individual student (i.e., you cannot use the same written answer as your group-mates). Late problem sets will lose 20% of total points scored for each day late before the solutions are posted, after which the problem set will receive a score of zero. Solutions will typically be posted within a week of the due date.

Policy Analysis Project:

A written assignment will be completed in the second half of the course. This assignment will involve the discussion and analysis of a real-world environmental policy. A detailed description and rubric of this project will be available in Canvas. Late submissions will not be accepted for credit outside of extreme extenuating circumstances.

The use of AI (artificial intelligence) for this project (and entire course) is expressly prohibited. If you use AI to write this project, you will, at minimum, receive a score of zero on the project and be reported to the Student Conduct & Conflict Resolution board.

Exams:

Dates:

Midterm 1: Friday, 2/21 (in class) Midterm 2: Friday, 3/21 (in class) Final: Tuesday, 5/6 at 1:30pm-4pm

- Note: Make up exams are not given. If you have an unavoidable conflict and know you will not be present for one of the exams, you must contact me within the first two weeks of class. If an emergency causes you to miss a midterm exam, you must contact me within 72 hours of the missed exam to discuss your options. Allowable exceptions are covered by campus guidelines on absences due to religious observance (see below) or, for the final exam only, if you have more than 3 final exams scheduled on the same day. If that is the case, you must contact me before March 1st.
- For students with documented accommodations for exams, please notify me within the first two weeks of classes.

Course Policies:

Cheating:

If you are caught cheating in any manner (including using AI assistance or generate text) on problem sets, exams, the project, or in-class activities, you will receive, at minimum, a zero for the assignment on which you cheated and will be reported to the Honor Code Council for review.

Artificial Intelligence:

The use of artificial intelligence including, but not limited to, ChatGPT, Dall-E 2, etc., is prohibited for this course. This means that students are not allowed to use artificial intelligence to complete

assignments or pass off work as their own. Though not allowed on homework assignments or exams, artificial intelligence may offer students a quick way to help organize information when studying and preparing for quizzes or exams. The use of AI to develop study plans or tools is allowed. Please keep in mind that the information received from AI text generators is not always accurate or complete and could create further confusion on course concepts.

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.

ACCOMMODATION FOR DISABILITIES, TEMPORARY MEDICAL CONDITIONS, AND MEDICAL ISOLATION

Disability Services determines accommodations based on documented disabilities in the academic environment. If you qualify for accommodations because of a disability, submit your accommodation letter from Disability Services to your faculty member in a timely manner so your needs can be addressed. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance.

If you have a temporary medical condition or required medical isolation for which you require accommodation, you must email me as soon as possible. Also see Temporary Medical Conditions on the Disability Services website.

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 believe they 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 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 Don't Ignore It.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, you must notify me of conflicts with exams within the first 2 weeks of the semester and conflicts with homework/projects at least 3 days in advance of the deadline.

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.