

University of Colorado Boulder

**Econ 8535 – Environmental Economics I
Fall 2025**

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Lectures: Tuesday and Thursday, 12:30-1:45pm ECON 5

Office hours: Tuesday and Thursday 9:30-11:00am (and as need be – just ask!)

Course Description: This course provides a Ph.D. level survey of environmental economics. We will examine the literature and methods used in analyzing environmental and related resource economics problems from an economic perspective. As this is the first course in a two-course sequence, the focus will be primarily on theoretical concepts and a broad overview of key ideas, with empirical methods covered in more depth in the second course.

Course Organization: This course will be a mix of lecture and discussion. There will be six major units, and you will be expected to write four ~8-page papers on units of your choice. For one of the units that you choose to write on, you will be required to lead discussion for one class. The paper and presentation are discussed in more detail below.

Textbooks: There are no required textbooks, but there are two classic “standards” in environmental and resource economics that are worth acquiring

Environmental: William J. Baumol and Wallace E. Oates, *The Theory of Environmental Policy*, 2nd edition (Cambridge University Press, 1988).

Resource: Jon M. Conrad and Colin W. Clark, *Natural Resource Economics: Notes and Problems*, Cambridge University Press, 1987.

In addition, Robert N. Stavins, *Economics of the Environment: Selected Readings*, 7th Ed, is an excellent collection of important articles in environmental economics.

For a more intuitive but still rigorous treatment of many of the topics we’ll discuss, you should also consider: Nick Hanley, Jason F. Shogren, and Ben White; *Environmental Economics: In Theory and Practice*, 2nd Ed, 2007

The reading list, drawn primarily from academic journals, will be provided in a separate document on Canvas. I AM UPDATING THIS LIST – CHECK OFTEN. Readings should be available electronically. Students are expected to have read all materials prior to class and should be prepared to discuss and answer questions regarding the readings.

Grading:

Papers and Presentation 60%

Assignments 20%

Class Participation 20%

Papers and Presentation: You will be required to write four papers (out of the six total units), each roughly 8 pages in length. They should be professional (organized and typo-free) and include a complete list of citations. You should view the paper as a literature analysis on a relatively narrow topic within each unit – that is to say, you should focus on a specific topic that interests you within each unit, rather than review the entire unit. The reading list should be viewed as a “gateway” to the literature, and I expect a majority of citations to be papers that you find on your own (and not on the reading list). For the presentation, I expect you to be able to lead the class discussion based on your paper for that unit (e.g. prepare slides). The presentation will counted as “equivalent” to a paper, and I will take your top four scores (out of the four papers plus presentation) in computing your grade.

Assignments: There will be four assignments that will enhance your abilities to develop economic models. As opposed to typical “problem sets,” the assignments will be modeling exercises where the emphasis will be on developing simple economic models of economic phenomena based on environmental and resource topics that I provide. Think of it as a “flipped” problem set where you will come up with the model and problem. More details will be provided with the first assignment.

Class Participation: Students are expected to have read materials prior to class and should be prepared to discuss and answer questions regarding the readings. Attendance is of course expected.

Tentative Schedule

Introduction – Foundations of Environmental and Resource Economics (Week 1)

I. Market Failure and Environmental Goods (Week 2-3)

- A. Market success
- B. Externalities and Welfare

II. Environmental Valuation (Week 4-6)

- A. WTA and WTP
- B. Revealed Preference methods
- C. Stated Preference methods

III. Policy Choice I (Week 7-8)

- A. Market-based vs command and control
- B. Taxes and permits
- C. Standards

- IV. Policy Choice II (Week 9-10)
 - A. Uncertainty and selection
 - B. Multiple market failures and second-best policy

- V. Resource Economics (Week 11-12)
 - A. Non-renewable Resources
 - B. Renewable Resources
 - C. Property Rights and Institutions

- VI. Additional Topics (Week 13-15)
 - A. Waste and recycling
 - B. Uncertainty, dynamics and discounting
 - C. Transboundary pollution and international agreements

Final exam period (last unit presentation) Tuesday Dec 9th 4:30-7:00pm

Important Stuff

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 of 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 Student Conduct & Conflict Resolution and will be subject to academic sanctions from the faculty member. Visit [Honor Code](#) for more information on the academic integrity policy.

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 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. 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](#).
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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 abuse (dating or domestic

violence), stalking, and related retaliation by or against members of our community on- and off-campus. 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 OIEC@colorado.edu. Information about university policies, [reporting options](#), and [OIEC support resources](#) including confidential services can be found on the [OIEC website](#).

Please know that faculty and graduate instructors are required to inform OIEC when they are made aware of incidents related to these concerns regardless of when or where something occurred. This is to ensure the person impacted receives outreach from OIEC about resolution options and support resources. To learn more about reporting and support a variety of concerns, 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.