

University of Colorado Boulder

**Econ 8535 – Environmental Economics I
Fall 2019**

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Lectures: Tuesday and Thursday, 9:30-10:45 Econ 5

Office hours: Wednesday 9:00-11:00, Thursday 12:30-1:30

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 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 8-10 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 “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*, 6th Ed, 2012, is an excellent collection of important articles in environmental economics.

For a more intuitive 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. 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, each roughly 8-10 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 review on a relatively narrow topic within each unit – that is to say that you should focus on a specific topic 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. 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 and 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.

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

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

IV. Policy Choice II (Week 9-10)

- A. Uncertainty and selection
- B. Double-dividend 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

Important Stuff

ACCOMMODATION FOR DISABILITIES

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 or injury, see [Temporary Medical Conditions](#) under the Students tab on the Disability Services website.

CLASSROOM BEHAVIOR

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail 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. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

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 policy may include: plagiarism, 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 the Honor Code (honor@colorado.edu); 303-492-5550). Students who are found responsible for violating

the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct intimate partner abuse (including dating or domestic violence), stalking, protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

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. See the [campus policy regarding religious observances](#) for full details.