

Environmental Economics

ECON 3545 - Summer 2015

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	This is the best way to contact me. If you do not receive a reply within 24 hours, please assume I did not get your email and resend it.
Office	ECON 14
Office Hours	Monday, Tuesday, Thursday 11:00 AM - Noon and by appointment, via email
Class Meetings	MTWHF 9:15-10:50, ECON 117
Course Website	The course website is accessed through Desire2Learn where you will find all related course materials.

Course Description and Objectives

The field of economics provides many insights on the use and preservation of our natural environment. In this course we will investigate the unique contributions of economics to studying environmental issues and analyzing environmental policies from an economic perspective. From this course students should have a clear understanding of how economic theory informs public policy as well as some knowledge of what policies are currently being used in environmental issues.

This course is designed for non-economics majors and as such will require less math than other economics courses (see prerequisites). Instead we will blend learning economic theory and (some) mathematical models with discussion of real world examples.

Prerequisites

A basic understanding of microeconomics is required for this class. Students should have previously taken ECON 2010 (Principles of Microeconomics) or an equivalent class at another institution.

This course requires students to know basic algebra at the same level as the aforementioned ECON 2010. There will not be any formal math review as part of this class.

Readings & Other Materials

Tom Tietenberg & Lynne Lewis (2009). *Environmental Economics & Policy*, Pearson, 6th Edition (required)

Tietenberg & Lewis (2009) is the required text for this class and will be a nice resource for most of the material we cover. It is an expensive book so I encourage you to look for the cheapest buying option (including used and ebooks). I do not

have experience with previous editions and thus cannot say whether or not the material is the same.

Additional required readings/videos/audio will be assigned throughout the semester. I will provide these assignments either through the course website, or with explicit instructions. These additional readings will include original source readings on important environmental economics theory, current reporting on environmental issues, and video or audio on specific topics.

Grading

Your final grade will come from four components:

20%	Midterm Exam, July 24th
25%	Final Exam, August 7th
25%	Paper Assignment, due August 3rd
30%	Homework

I retain the right to curve assignments and exams, however, any curve will never harm any student in the class (it must be a pareto improvement over the original allocation.) Letter grades will be assigned to a typical scale with A, 90%-100%, B, 80% - 89%, C, 70% - 79%, D, 60% - 69%, and anything below 60 is an F. + or - letter grades will be assigned if you are within 2% of a grade cutoff.

Exams

We will take a total of two exams in this course: one midterm and the final exam. The midterm exam will be held during normal class time. The final exam will be cumulative, but will focus on new material. There are no makeup exams. If you miss the midterm then your final will be worth 45% of your final grade. The final exam cannot be dropped for any reason.

Scientific and basic calculators will be allowed for the midterm and final, but you will not be able to use cell phones or graphing calculators. Additionally, you are not able to share calculators during exams. It is my intention that any calculations you will need to do will be easy to do with pen and paper, but I fully understand the comfort of having an electronic adding machine in high pressure situations.

Homework

There will be 3 graded problem sets assigned through the semester (2 before the midterm, and 1 after). These problems sets will be a combination of economic modeling problems (think supply and demand from microeconomics) and short answer. I encourage you to work with other people in the class, but every person will need to turn in their own problem set. Short answer questions should be answered in your own words, although discussion with others is encouraged. Each problem set will be worth 5% of your overall grade. Problem sets are due at the beginning of class on the assigned due date.

For each assigned reading (or other media) assignment you will write a 1-page, double-spaced, typed summary that answers the following questions:

1. What is the central thesis of the author?
2. Summarize one or two of the main arguments made by the author.
3. What is an argument against the author's thesis?

Five reading assignments will be randomly graded and will collectively make up 15% of your final grade. Reading assignments are due at the beginning of class on the assigned due date.

Paper Assignment

You will write a 4-5 pg, double-spaced paper on an environmental topic of your choosing. In the paper you will discuss an economic theory relevant to your topic and then analyze your topic using this theory and research from the economics literature. There will be weekly updates due through D2L on your topic, research questions etc. See the paper handout for more details.

FERPA

In accordance with the law, I am not allowed to ever email your grades to you or to distribute them in any way that is identifiable. As such, I will post grades only on D2L, or you may come to office hours to get your grades. Never ask me to email them or bring them to class; I will not do either.

Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services at least two weeks before exams so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and <http://www.Colorado.EDU/disabilityservices>.

If you have a temporary medical condition or injury, see guidelines at <http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html>.

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at <http://www.colorado.edu/disabilityservices>.

Religious Observance Policy

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. If you have a conflict, please contact me the first week of class so that we can make proper arrangements. See full details at http://www.colorado.edu/policies/fac_relig.html.

Classroom Behavior Policy

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 differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity, and gender expression, age, disability, and nationalities. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Discrimination and Harassment Policy

The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, the University of Colorado Sexual Harassment Policy and Procedures, and the University of Colorado Conflict of Interest in Cases of Amorous Relationships Policy apply to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127, or the Office of Student Conduct (OSC) at 303-492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.

Tentative Schedule

Week 1

7/7 – Class introduction, Ch1 Micro Review

7/8 – **Homework Due: Fullerton and Stavins, *Nature* 1998**
Ch4 Market Failures

7/9 – Ch4 Cont.

7/10 – **Homework Due: Coase, *Journal of Law and Economics* 1960**
Ch6 Population

Week 2

7/13 – **Homework Due: Hardin, *Science* 1968**
Ch6 Cont.

7/14 – **Homework Due: Problem Set #1**
Ch2 Valuation

7/15 – **Homework Due: “Worth” Radiolab podcast**
Ch3 Valuation Techniques

7/16 – Ch3 Cont.

7/17 – **Homework Due: Solow, “Sustainability: An Economist’s Perspective”**
Ch5 Sustainability

Week 3

7/20 – Ch14 Economics of Pollution

7/21 – Ch14 Cont.

7/22 – **Homework Due: Problem Set #2**
Ch15 Stationary Air Pollution

7/23 – Ch15 Cont. & Midterm Review

7/24 – Midterm

Week 4

7/27 – **Homework Due: “Martin Weitzman on Climate Change”, EconTalk 2015**
Ch16 Climate Change

7/28 – **Homework Due: Auffhammer, “The Economics of EV Charging Stations” 2015**
Ch17 Transportation

7/29 – Ch17 Cont.

7/30 – **Homework Due: TBD Water reading**
Ch18 Water Pollution

7/31 – Ch18 Cont.

Week 5

8/3 – Ch19 Waste and Recycling

8/4 – **Homework Due: TBD Development reading**
Ch19 Cont.

Ch20 Development

8/5 – **Homework Due: Problem Set #3**
Ch20 Cont.

8/6 Review

8/7 Final