

# Environmental Economics

## ECON 3545 – Spring 2017

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<b>Office</b>	ECON 14
<b>Office Hours</b>	Mon/Fri 10:00 AM – 11:30 AM, and by appointment, via email
<b>Class Meetings</b>	MWF Noon – 12:50 PM, HUMN 250
<b>Course Website</b>	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). An ebook option is available.

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.

## Grading

Your final grade will come from three components:

30%	Highest Graded Midterm
10%	Lowest Graded Midterm
	- Midterm I, February 17 <sup>th</sup>
	- Midterm II, March 24 <sup>th</sup> (This is the day before spring break!)
30%	Final Exam, Wednesday May 10 <sup>th</sup> 4:30 – 7:00pm
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

There will be two midterms and a final exam. The midterm exams will be held during normal class time. In total your midterms make up 40% of your course grade. After completing both midterms your lowest midterm grade will be 10% of your course grade and your highest midterm grade will be 30% of your course grade. (If you get 65% on MTI and 90% on MTII then your total midterm grade for the course will be  $6.5 + 27 = 33.5$  out of 40 or a B overall on your midterms.) If you miss a midterm for ANY reason then it will automatically be your lowest graded midterm and your final will be worth 40% of your course grade. This means there are no makeup midterms during the semester. The final exam will be cumulative.

Exams will be a mix of multiple choice, short answer, essay questions and analytical problems. Basic and scientific calculators will be allowed; cell phones and calculators with memory are not allowed.

## Homework

There will be several graded problem sets and reading summaries throughout the semester. There will be about one assignment a week. Assignments will be posted on D2L and announced in class. These are due either before class uploaded on D2L or at the beginning of class. Late assignments will be marked down.

## Email and Office Hours

I encourage you to come to office hours (mine or the TAs) throughout the semester for questions about the material covered in class. Office hours are not a replacement for missing class.

Before sending an email please see if the syllabus has the answer. I will respond to emails within 24 hours of being sent. If I do not respond in that time please email me again. I often do not check email after 5pm so if you send me a question at 11:35pm (or even 5:45pm) don't expect an answer until the next day. Finally, I commit to respectful and formal email exchanges, I ask that students do the same.

## **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](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](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](mailto: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/>.

### **Topics Covered (in rough order):**

Fundamentals of Economics (Microeconomics Review)

What is Environmental Economics? Ch1

Market Failures Ch 4

Population Ch 6

Sustainability Ch 5

### **Midterm I**

Valuation Ch 2

Valuation Techniques Ch 3

Economics of Pollution Ch 14

Stationary Air Pollution Ch 15

Climate Change Ch 16

### **Midterm II**

Transportation Ch 17

Water Pollution Ch 18

Waste & Recycling Ch 19

Development and the Environment Ch 20

### **Final**