

AREC 341: Environmental Economics
Department of Agricultural and Resource Economics
Colorado State University
T-Th, 2:00pm-3:15pm, Clark A 204
Fall, 2018

Course Syllabus

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Office Hours: Monday: 12:30pm – 1:30pm, Tuesday: 3:30pm-4:30pm

Final Exam: Thursday December 13th, 9:40am-11:40am in Clark A 204

Grader: Farjana Ahmed, Office hours: Tuesday/Thursday: 12:30pm-1:30pm, Friday, 9:30am-10:30am

Course Description

This course is an upper level undergraduate economics course that develops and applies the tools of microeconomics to environmental problems facing society. Content builds on material seen in AREC/ECON 202 and AREC/ECON 240. Key economic concepts developed in the class include theories of social choice, environmental regulation, risk and uncertainty, land conservation, environmental valuation, and economic development and the environment. Students in the class learn to view environmental challenges through an economics lens while developing data management skills crucial to employment in the field.

Course Objectives

My goal for this course is twofold. Students completing the class should be able to apply the economics way of thinking when examining environmental problems in the real world. Next, I hope that students can take this as an opportunity to learn tools valuable for future employment, whether in private industry (e.g., consulting), government, or academia. Assignments and class lectures are meant to achieve these goals while working towards DARE Outcomes (see below).

Prerequisites

Prerequisites for the course include AREC/ECON 202 and AREC/ECON 240. In general, I assume that you have seen (and hopefully remember) the basics of microeconomics, including consumer and producer theory, though I am happy to review this material, especially in office hours.

Required Textbook

Tietenberg, Thomas H., and Lynne Lewis. *Environmental and Natural Resource Economics*, 11th Edition. Routledge, 2018.

Grading

Grades for the class come from 5 homework assignments (in groups of 2-3) (20%), two economic analyses (10%), two in-class mid-terms (15% each), a final exam (20%), an in-class presentation (10%), and class participation (10%). Descriptions of each assignment will be made available online. Exams are cumulative.

Attendance

I do not have an official attendance requirement, though class participation is included in your final grade. Also, class attendance should efficiently prepare you for exams. If you plan to miss class, please inform me beforehand (email is fine).

If you have questions about class material, homework, or other assignments, please come to office hours. Both X and I are here to help you with the material.

Late Assignments Policy

I do not accept late assignments. Assignments are due in class so if you need to miss class, please make appropriate arrangements to hand it in beforehand. Email assignments will not be accepted unless prior arrangements have been made.

Cell Phones and Computers

In general cell phones should be off or on silent during class. Please no texting, etc.

Laptops can be helpful for note-taking, etc. but if used inappropriately, participation grades will be reduced.

Canvas

I share course material using Canvas, in the Modules section. The Modules should have intuitive names (e.g., homework is in the Homework Module) but please let me know if you have questions. Grades will also be kept in Canvas.

If you are a student who will need accommodations in this class due to a disability or chronic health condition, please make an appointment with me to discuss your individual needs. Any accommodation must be discussed in a timely manner prior to implementation. A verifying accommodation letter from Resources for Disabled Students is required before any accommodation is provided. Student Disability Center <https://disabilitycenter.colostate.edu/> located in TILT, room 121 or via phone 970-491-6385.

Class Topic Outline (subject to change)

<i>Topic</i>	<i>Reading</i>	<i>Important Dates</i>
1. Course Introduction	T&L, Chs. 1-2	
2. Evaluating Tradeoffs (Benefit-Cost Analysis)	T&L, Ch. 3	HW 1 due ~9/7
3. Valuing the Environment	T&L, Ch. 4	HW 2 due ~9/21
4. Sustainability	T&L, Ch. 5	Econ analysis 1 due ~9/28
5. Market Failure	T&L, Ch. 14	MT 1 10/2
6. Pollution Regulation	T&L, Chs. 14-16	HW 3 due ~10/18
7. Recycling	T&L, Chs. 8	HW4 due ~11/8 MT 2 11/20
8. Climate Change	T&L, Ch. 17	
9. Water Pollution	T&L, Ch. 18	Econ analysis 2 due ~11/29 HW 5 due ~12/6
10. Environmental Justice	T&L, Ch. 19	Student Presentations last 3 classes
		Final Exam: 12/13, 9:40-11:40am

DARE Outcomes

Successful graduates from undergraduate programs in Agricultural and Resource Economics will exhibit the following characteristics:

Professional Development: Graduates will embody a general awareness of issues in agricultural and natural resource management and their implications in a larger societal context. Students will begin to develop a network of personal and professional connections which will foster an understanding of the culture surrounding professional expectations and conduct.

Technical Competence: Graduates will demonstrate technical competency including the ability to appropriately use economic theory in formulating analytical problems, identifying and gathering appropriate data, and employing appropriate economic methods to analyze those problems, utilizing appropriate available computer technology.

Problem-solving Skills: Graduates will demonstrate the ability to solve real-world problems beyond the context of the classroom. Students will be able to identify a problem and its scope, evaluate resources available to address the problem, formulate alternative solutions, and select the solution(s) most consistent with a stated objective.

Communication Skills: Graduates will demonstrate proficiency in oral and written communication in terms of substance, organization, mechanics, documentation, and synthesis. Proficient students will have the ability to clearly communicate findings, critically and analytically, at a professional level within their chosen career.

Leadership: Graduates will have developed leadership qualities that they will use in their professional, personal and community interactions leveraging the other competencies acquired in the program. These leadership qualities include vision, initiative, personal responsibility, team building, and motivating collective action.