

Environmental Policy and Economics
Summer 2017
Tuesday & Thursday 9:00-12:30
Interdisciplinary Sciences Building 221

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Optional Section: Wednesday 1:00-2:00 pm, Physical Sciences 130

Course Description and Overview

This course introduces students to the basic concepts and tools from environmental economics as they apply to environmental policy. The course is designed to explore concepts from environmental economics and provide students with a firm grounding in understanding how economics can be applied to address environmental issues. Economic thinking is integral to the way societies engage with problems, understanding how policy decisions are made, and the factors that go into decision making.

Throughout the quarter we will review basic economic concepts and examine the way environmental economists adapt neoclassical economic tools to address environmental issues. Topics include property rights and externalities, valuation, sustainable development, natural resource consumption (nonrenewable and renewable), and pollution. We will review, criticize, and extend the basic economic tools that all students of environmental policy must understand.

Learning Outcomes

Students will learn to formulate conclusions by applying the basic concepts and tools from environmental economics, and develop an understanding of their policy implications. We will examine the economic underpinnings of environmental problems by exploring case studies on topics related to water supply and quality management, climate change, energy, and ozone, among other things, and the extent to which policy responses have been successful.

Because this is a summer session course, it will inherently be challenging to keep pace with the reading and lecture schedule. For success in the course, it is critically important that course participants are prepared to do a considerable amount of work outside of class. This is a condensed summer course so the reading and writing schedule will be particularly rigorous. It is important that everyone stays up to date on the readings so that we all may meaningfully participate in the class discussions. All readings should be completed before the class for which they are assigned.

COURSE REQUIREMENTS

Important Dates

- **Assignments:** Due dates listed below (due at the beginning of class)
- **Midterm Examination:** July 13
- **Final Examination:** July 27

Grading

Class Participation: 100 points

Assignments (5 assignments): 300 points

Project (Paper and Presentation): 100 points

Midterm Exam: 200 points

Final Exam: 300 points

Total: 1,000 points

Attendance

Students are expected to **attend all sessions**, complete course readings, and engage critically with the topics that are discussed in class. If you anticipate missing a class meeting, you **must send an email to the instructor or teaching assistant prior to** the class meeting time with a valid excuse. If you do not do so, your absence will be considered unexcused. **Any unexcused, or more than one excused absence, will result in a loss of 50 participation points. Three absences will result in failing the class.**

Readings

Course readings are an integral part of the learning process, prepare you for lecture material, and contain material that may not be presented in lecture. Additional readings may be announced during the course and will be made available on Canvas. Material from the readings **will** appear on pop quizzes and exams even though it may not be presented in lecture. **Do the reading; succeeding in the course will be difficult otherwise.**

The course text is available at the Baytree bookstore:

Goodstein, E. and Polasky S. (2014). Economics and the Environment, 7th Edition. John Wiley & Sons, Inc.: NY, NY

Canvas

Course information will be available through Canvas (canvas.ucsc.edu), including lecture slides, readings, discussions, and announcements. Students should familiarize themselves with Canvas as early in the course as possible.

Class Participation

Your participation is valued and will demonstrate your preparation for the class discussions. Points will be awarded for general participation (60 pts.) as well as a participation in Peer Discussions of course reading material and current environmental issues from the news (40 pts.).

General participation points can be earned by: 1) asking questions participating in classroom discussions, and 2) coming to office hours/section.

Peer discussion points will be awarded for posting a discussion on Canvas at least once during the course. Prior to each session, roughly 7 students will prepare a discussion on Canvas, and 2-4 students will be selected at random to facilitate discussion during lecture. In preparation for peer discussions, students are required to: (1) prepare a brief (1-2 paragraph) reaction to reading material including a brief discussion of 2-3 concepts or ideas from the reading that were found to be particularly interesting and a brief explanation as to why they were interesting, (2) share a recent news article that relates to concepts introduced in the readings or lecture, and (3) 1-2 questions for classroom/online discussion. Students who are not facilitating discussion are expected to respond, on Canvas, to a reaction from one of their peers at least twice during the quarter.

These discussions serve several purposes: (1) to review and apply course readings and course content, (2) to share and learn about different opinions among students, and (3) to gain experience facilitating peer discussions and speaking in class.

Assignments

All assignments will be posted on Canvas. Assignment questions will be designed to deepen your understanding and to make you think critically about the class material. The problems and questions will prepare you for the types of questions that you will see on the midterm and final exam. Assignments must be written concisely and points raised in the assignments must be elaborated clearly. **Follow directions: Be sure to answer all parts of each assignment completely.** A high quality assignment will be thoughtful, clear, persuasive, and complete. In short, think about what you are learning, explore outside readings, and write clearly about your views.

All students are required to bring completed assignments to the class sessions noted below. **Late assignments will not be accepted.** Written assignments must be typewritten (word length, formatting, and instructions will be included with each assignment). Double-space your work and print double-sided if possible to save paper.

You will be expected to refer to past readings and lectures in your assignments. When applicable, requirements for citations will be provided. You will be expected to cite properly and this will be part of the assignment evaluation.

Plagiarism is not tolerated, and will result in not passing the course, as well as possible university action. If you are unclear as to what plagiarism is, please refer to section 102.012 of the student handbook, <http://www2.ucsc.edu/judicial/handbook.shtml> or see the instructor or the teaching assistant.

Project

In pairs, students will be asked to prepare a 2-3 page policy brief to discuss and evaluate an environmental issue of your choosing. The policy brief will include:

- Important background information (i.e., existing policies, causes, social and environmental consequences)
- Identification of key actors (i.e., industries, vulnerable populations, etc.)
- Identification of the economic aspects (i.e., benefits/costs) of addressing the issue
- A policy recommendation

One student will be asked to prepare a brief that supports policy action to address the environmental issue, while the other will prepare a brief that opposes policy action. Both documents will need to use supporting evidence (i.e., discussion of the benefits and costs of regulation) to defend your respective stance on the issue. Students will submit the policy brief and present a 5-minute presentation during the final week of class. A detailed outline of the project requirements and components will be provided prior to the second class meeting.

Exams

The examinations will be closed-book and no-note exams. Dates and times for the examinations are final; there will be no make-ups or alternate dates. The final exam will be cumulative in the sense that it builds from concepts and foundations discussed in the first portion of the course. The content for these examinations will come from lectures as well as required readings.

Summer Session Students with Disabilities

If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me as soon as possible, preferably within the first week of the Summer Session. Contact DRC by phone at **831-459-2089** or by email at **drc@ucsc.edu** for more information.

COURSE LECTURE AND READING SCHEDULE

Week 1

Session 1 (June 26): Introduction to Environmental Policy and Economics

Session 2 (June 28): Ethics, Externalities, & the Efficiency Standard; Intro. to Excel

Reading: Goodstein & Polasky Chs. 2, 3 & 4; (Ch. 1 optional)

Please bring a laptop to class

Week 2

Session 3 (July 4): No Class

Session 4 (July 6): Benefits, Costs & the Safety Standard

Reading: Goodstein & Polasky Chs. 5, 6 & 7

Due: Assignment 1

Week 3

Session 5 (July 11): Sustainability & Sustainable Development

Reading: Goodstein & Polasky Chs. 8, 9 & 10

Due: Assignment 2

Session 6 (July 13): MIDTERM; Environmental Politics & Policy

Reading: Goodstein & Polasky Chs. 12, 13, 14

Week 4

Session 7 (July 18): Policy Tools: Command-and-Control vs. Incentive-Based

Case Study: Water Quality & Acid Rain; Climate Change

Reading: Goodstein & Polasky Chs. 15 & 16

Due: Assignment 3

Session 8 (July 20): Energy: Economics & Policy

Case Study: Renewable Energy

Reading: Goodstein & Polasky Chs. 17 & 18

Due: Assignment 4

Week 5

Session 9 (July 25): Population & Environment, Intl. Environmental Policy; Presentations

Case Study: The Ozone Layer & Global Climate Change; Allison Lecture

Reading: Goodstein & Polasky Chs. 19 & 21

Due: Assignment 5

Session 9 (July 27): FINAL EXAM; Presentations

Reading: Goodstein & Polasky Ch. 21

Final Papers Due