

ENVS 25: Environmental Policy and Economics – Summer Session II, 2016
Tuesday & Thursday 9:00-12:30 – Natural Sciences Annex 102

Instructor: Duran Fiack
483 Natural Sciences II
dfiack@ucsc.edu

Office Hrs: Tuesday 1:30-2:30 pm and Wednesday 5:00-6:00 pm or by appointment

Teaching Assistant: Rachel Shellabarger
429 Natural Sciences II
rshellab@ucsc.edu

Office Hrs: Wednesday 2:30–3:30 or by appointment

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 decisionmaking.

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.

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, agriculture, climate change, energy, ozone depletion, and water quality, 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:** August 9
- **Final Examination:** August 25

Grading

Class Participation: 100 pts

Assignments (5 assignments): 300 pts

Project (Paper and Presentation): 100 pts

Midterm Exam: 200 pts

Final Exam: 300 pts

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. Because there are only ten sessions total in this course in the summer session, **any unexcused or more than one excused absence will result in 50 points docked. 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 eCommons. 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.

Course texts are available at the Baytree bookstore:

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

eCommons

Course information will be available through eCommons (<https://ecommons.ucsc.edu/xsl-portal>), including lecture slides, additional readings, and announcements. Students should familiarize themselves with eCommons as early in the course as possible. If needed, use information provided on the site under “Startup Help for Students”.

Class Participation

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

General participation points are attained by asking questions and making comments in class, coming to office hours/section, and participating in classroom discussions.

Peer discussion facilitation points will be awarded for being a discussion leader once during the course. During each session, roughly 6 students will present prepared comments to the class and lead a discussion. 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; (3) to gain experience facilitating peer discussions and speaking in class.

In preparation for peer discussions, students are required to (1) prepare a brief (1-2 paragraph max) reaction to course reading material, (2) share a recent news article that relates to concepts introduced in the readings or lecture, and (3) pose 2 well-composed and thought provoking questions.

To help prepare comments to facilitate the discussion, you may wish to explore the following questions:

- What are the main points or themes in the reading?
- How can we use economics to help address the environmental issue?
- What concepts from the reading relate to the issue?
- Do you agree with the author's central assertions, theories, or ideas? Why or why not?

Assignments

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 the question 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 lengths and instructions will be included with each assignment). Double-space your work and print double-sided if possible to save paper.

Calculation assignments must be completed neatly and legibly or points will be docked. **Unless instructed otherwise, you must bring a hard copy of the assignment to class.**

You will be expected to refer to past readings and lectures in your assignments. When applicable, requirements for citations will be included with instructions for assignments (see the instructor or teaching assistant in office hours if you need help constructing proper citations). 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 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., evaluation 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](tel:831-459-2089) or by email at drc@ucsc.edu for more information.

COURSE LECTURE AND READING SCHEDULE

Week 1

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

Session 2 (July 28): Ethics, Externalities, and the Efficiency Standard

Intro to Excel

Reading: Goodstein Chs. 2, 3 & 4, Hardin

Please bring a laptop to class

Week 2

Session 3 (August 2): Benefits, Costs & the Safety Standard

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

Due: Assignment 1

Session 4 (August 4): Sustainability & Sustainable Development

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

Due: Assignment 2

Week 3

Session 5 (August 9): MIDTERM; Environmental Politics & Policy

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

Session 6 (August 11): Policy Tools: Command and Control vs. Market-Based Policies

Case Study: Water Quality & Acid Rain

Reading: Goodstein & Polasky Chs. 15 & 16

Due: Assignment 4

Week 4

Session 7 (August 16): Energy, Economics and Policy

Case Study: Renewable Energy

Reading: Goodstein & Polasky Chs., 17 & 18

Assignment 5 Due

Session 8 (August 18): Agriculture, Population & the Environment & Presentations

Case Study: Agriculture

Reading: Goodstein & Polasky Ch. 19

Week 5

Session 9 (August 23): International Environmental Policy & Presentations

Case Study: The Ozone Layer & Global Climate Change

Reading: Goodstein & Polasky Ch. 21

Final Papers Due

Session 10 (August 25): FINAL EXAM