

University of Hawaii at Manoa
Department of Economics

Environmental Economics
ECON 358, Spring 2009
(Tentative syllabus; subject to change)
TR 1:30PM-2:45PM POST 127

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Office Hours: TR 3:00PM-4:00PM and by appointment.

Course Content

In this course we study the use of natural resources and the management of environmental quality from the perspective of economics. The course covers conceptual and methodological topics, including sustainability, as well as applications to contemporary environmental issues such as depletion of fish stocks and climate change. The first part of the course is an introduction to the principles of environmental and resource economics. The second part deals with the current issues we have about the use of various environmental resources. In the final part we discuss policies to the way we use environmental resources. Through a group project, students will apply an economic analysis on local environmental issues.

Learning Objectives

- Gain familiarity with the economic approach to issues of allocation and management of natural resources and environmental goods;
- In particular, learn about (1) the concepts and methods of cost-benefit analysis and (2) policies/institutions for various environmental-conservation and pollution-control objectives.
- Develop an awareness of current economic issues concerning environmental and resource policy in the US and around the world.

Prerequisites:

Econ 120, 130, 131 or the instructor's consent.

Course Requirements	Contribution to the course grade
Problem sets, occasional quizzes	25%
Midterms (two expected)	25%
Group Project/Participation*	25%
Final (May 14 Thursday, 12:00-2:00)	25%

(The instructor reserves the right to determine the cutoff points for the grading scale.)

There are NO MAKEUP EXAMS except under extraordinary circumstances. Problem sets are intended to prepare you for the examinations. Although they constitute only 25% of your final grade collectively, it is highly recommended you take them seriously! Everyone will participate in a group project (details to be given later). If we have time, the groups will present their work during the last 2 weeks of the semester. Optional bonus-point assignments may be available (details to be announced).

Required Textbook

Tietenberg, Tom and Lynne Lewis (2008) *Environmental and Natural Resource Economics*, Eighth Edition, Pearson.

(You could use the seventh edition (Tietenberg, Tom. *Environmental and Natural Resource Economics*, Pearson, 2006), which is not too different from the eighth edition, though the lectures will be based on the eighth edition.)

Resources at Laulima

Additional readings, as well as lecture slides, will be available online at Laulima:

<https://laulima.hawaii.edu/portal> . **Please check Laulima and email regularly for announcements and assignments.**

Course Outline

We will closely follow the textbook. While the book contains more material than can be covered adequately in a semester, supplementary materials will be necessary for some topics (e.g. climate change). Hence, we will need to skip some of the topics listed below and supplement some of them with additional readings..

(In what follows, the chapter numbers follow the Eighth edition.)

I. Introduction and foundation of environmental economics

Introduction: Why study economics to deal with environmental and resource issues?

Chapter 2 Valuing the Environment: Concepts

Chapter 3 Valuing the Environment: Methods

Chapter 4 Property Rights, Externalities and Environmental Problems

Chapter 5 Sustainable Development: Defining the Concept

II. Natural resource economics

Chapter 6 The Population Problem

Chapter 7 The Allocation of Depletable and Renewable Resources: An Overview

Chapter 8 Energy: Transition from Depletable (Oil, Gas, Coal, Uranium, etc.) to Renewable Resources (Solar, Wind, etc.)

Chapter 9 Recyclable Resources: Minerals, Paper, Bottles, and E-Waste.

Chapter 10 Replenishable but Depletable Resources: Water

Chapter 14 (13 in the 7th Ed.) Common-Pool Resources: Fisheries and Other Species

III. Economics of pollution control

Chapter 15 Economics of Pollution Control: An Overview

Chapter 16 Stationary-Source Local Air Pollution

Additional lectures on corporate social responsibility and corporate environmentalism

Chapter 17 Regional and Global Air Pollutants: Acid Rain and Atmospheric Modification

Additional lectures on climate change

IV. Sustainable development revisited (Chapters 22 and 23 if we have time)

V. Summary

Disability Access

If you feel you need reasonable accommodations because of the impact of a disability, please: (1) contact the KOKUA Program (V/T) at 956-7511 or 956-7612 in room 013 of the QLCSS (Queen Lili'uokalani DCenter for Student Services); (2) speak with me privately to discuss your specific needs. I will be happy to work with you and the KOKUA Program to meet access needs related to a documented disability.