Ver. April 23, 2008

University of Hawaii at Manoa
Department of Economics

Environmental Economics
ECON 358, Fall 2008
(Tentative; subject to change)
MW 10:30-11:45AM KUYKENDALL 301

Instructor: Nori Tarui
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Office Hours: To be announced 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.

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:

Problem sets, occasional quizzes	20%
Midterms (two expected)	30%
Presentations/Participation*	20%
Final (Dec 19 Friday, 9:45-11:45)	30%

There are NO MAKEUP EXAMS except under extraordinary circumstances. Problem sets are intended to prepare you for the examinations. Although they constitute only 20% 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, extra-credit group projects will be possible (details to be announced).

Required Textbook:
Tietenberg, Tom and Lynne Lewis (2008) *Environmental and Natural Resource Economics*, Eithth 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.)

Additional readings, as well as lecture slides, will be made available at Laulima (details to be announced).

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 seventh 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 Depletable, Nonrecyclable Energy Resources: Oil, Gas, Coal and Uranium
Chapter 9 Recyclable Resources: Minerals, Paper, Glass, etc.
Chapter 10 Replenishable but Depletable Resources: Water
Chapter 12 Renewable Resources: Forests
Chapter 13 Renewable 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
Chapter 22 Development, Poverty and the Environment
Chapter 23 The Quest for Sustainable Development