

Economics 131 & 281: Environmental Economics

Syllabus and Reading List

Course Overview

This course is an introduction to an economics perspective of environmental systems and their problems, with special attention to the use, misuse, and overuse of natural and environmental resources.

The first part of the course will develop appropriate economic concepts, models, and tools for analyzing environmental and natural resource issues and problems. The second part of the course will apply the tools in a selection of environmental applications, including the efficient use of exhaustible and renewable resources and the control of pollution locally, nationally, and internationally.

Throughout the course we consider the separate and complementary roles of markets and governments in allocating and regulating the use of environmental and natural resources.

Lectures and Class Room

The course lectures during the Fall Quarter will be Tuesdays and Thursdays, from 12:30 - 1:50 a.m., in Center Hall 101. In addition, weekly sections will be held at times and places to be announced.

Sections, TAs, and Office Hours

This course has two numbers - 131 and 281. Economics 131 is the regular environmental economics course for undergraduates; Economics 281 is a special topics course conjoined this quarter to Economics 131 and is for graduate students, primarily those in the SIO IGERT Masters program in Marine Biodiversity and Conservation.

There are two T.A.'s for Econ 131: Ms. Dalia Ghanem and Mr. Kevin Novan. They will hold sections at a time yet to be arranged and announced. The sections will be used to go over pre-requisite economics material, questions arising from the lectures and readings, and, especially exam-type questions that will be posed from time to time during the lectures or posted on the UCSD WebCT class website.

Economics 281 also has a T.A.: Mr. Ben Gilbert, who will hold a special section for those graduate students enrolled in this course. His section will feature additional readings of

particular relevance to students in the IGERT/MAS program. The syllabus for this section is posted on the WebCT course home page.

Prof. Groves's Office Hours are on Wednesday, from 2:30 - 3:30 in Economics 317. Ms. Ghanem's and Mr. Novan's Office Hours will be announced once the sections are scheduled. Mr. Gilbert is available by appointment. Any changes in the instructors' office hours will be posted on the class website so check there for the latest information. Please take advantage of office hours and also use e-mail to contact any instructor at other times or if you need to make an appointment.

Please use WebCT for all course-related e-mail. E-mail sent to other addresses (e.g. my official UCSD account) may not receive a timely response. You must be logged into WebCT to send e-mail to WebCT mailboxes.

Exams and Grading

The grades for students enrolled in Economics 131 will be based on a Mid-Term Exam (35%) to be given on **WEDNESDAY, October 28, from 7:00 - 9:00 pm in Center Hall 212** and a Final Exam (65%) to be given on **FRIDAY, December 11** from 11:30 a.m. – 2:30 p.m. The exams will consist of questions similar (but not identical) to the exam-type problems mentioned above.

Students enrolled in Economics 281 will also take the mid-term exam, but will be given the option of either taking the final exam or writing a 20 page paper on an appropriate topic approved by the course instructors. Details about the paper assignment will be given in the section and posted on WebCT later.

Textbook and other Readings

The textbook for this course is N. Hanley, J. Shogren and B. White, *Introduction to Environmental Economics*, Oxford University Press, 2001. This textbook is quite terse and thus regular attendance at lectures will be essential for understanding the material at the required level.

In addition, supplementary reading will be assigned from time to time. When available in electronic form they will be made available through the course WebCT site (for copyright reasons).

Readings for the Economics 281 (Graduate) section can be found in the separate folder on the main WebCT course page. *All students enrolled in Econ 131 are invited to read these items as well.*

Course Outline and Reading Assignments

Introduction: Environmental Challenges and the Role of Economics
(1 lecture: September 24 – guest lecturer Professor Dale Squires)

Readings:

Introduction to Environmental Economics, Chapter 1.

Part I. Economic Tools: Markets, Valuation, and Cost-Benefit Analysis (3 weeks: September 29 - October 15)

1. Markets for the Environment

Readings:

Introduction to Environmental Economics, Chapter 2.

2. Valuing the Environment and Natural Resources

Readings:

Introduction to Environmental Economics, Chapter 3.

3. Cost-Benefit Analysis and Environmental Risk

Readings:

Introduction to Environmental Economics, Chapters 4 & 5.

Part II. Economic Tools: Sustainability and International Agreements (2 weeks: October 20 – 29)

4. Growth and Sustainable Development

Readings:

Introduction to Environmental Economics, Chapter 6.

5. Strategic Interaction and Trade

Readings:

Introduction to Environmental Economics, Chapters 7 & 8.

WEDNESDAY, October 28: MIDTERM EXAM

7:00 - 9:00 PM in Center Hall 212

Part III. Applying the Tools: A Selection of Applications (5 weeks: November 3 – December 3)

6. Transportation

Readings:

Introduction to Environmental Economics, Chapter 9.

7. Rainforests and Biodiversity

Readings:

Introduction to *Environmental Economics*, Chapters 10 & 13.

8. Water

Readings:

Introduction to *Environmental Economics*, Chapter 11.

9. Climate Change

Readings:

Introduction to *Environmental Economics*, Chapter 12.

10. Resources and Energy

Readings:

Introduction to *Environmental Economics*, Chapters 14 & 15.

FRIDAY, December 11: FINAL EXAM 11:30 AM - 2:30 PM