

Econ 131: Economics of the Environment

Winter 2007

Instructor: Stephen Stohs

Department of Economics, UCSD

Course Objectives

Econ 131 is an introduction to economics of the environment. The objective of the course is to provide basic familiarity with the application of the concepts and methods of modern economics to environmental problems.

This course requires an intensive ten-week commitment of time and effort. There are three basic pillars of success in this course:

1. Read and understand the assigned materials from the text and supplemental readings.
2. Prepare answers to the problem sets and submit them on time.
3. Attend lectures and understand the material covered in lecture.

Anyone who fulfills the above obligations in a timely manner can be reasonably assured of success in the course.

Prerequisites

The mathematical prerequisites for Economics 131 are ECON1A (Elements of Economics) and ECON1B (Elements of Economics) or ECON2 (Elements of Economics II). You should not enroll in the course unless you have satisfied the prerequisites.

Web Page

The course web page may be accessed at <http://webct.ucsd.edu>. Students are strongly advised to become familiar with accessing the web page early on, as this will be a repository for the syllabus, course lecture notes, problem sets and their solutions, and course announcements. Please access the course web site regularly in order to keep abreast of any changes. If you have any question regarding grading policy, exam format or any other issues, consult the course web page first. Chances are that you can find the answer there. If you cannot, please contact the TA or me by e-mail.

Textbooks and Readings

Required:

The required text for this class is *Economics and the Environment*, Eban S. Goodstein (Wiley 2005). I have asked that copies of the book be placed on reserve at SSH.

Supplemental readings will be used to augment the textbook treatment of course topics. These

will be posted to the course web site if an electronic version is available; otherwise they will be distributed in lecture.

Problem Sets

There will be four assignments, each of which will carry a weight of 5% towards the final grade. The assignments will be posted on the course web site one week before the due date, and will be due at the start of lecture the following week. Group study and free discussion are encouraged, but you should write up and submit your own answers. Do not e-mail assignments. Late homework will generally not be accepted. If you have a valid excuse, please e-mail me. I will return your graded problem sets to class. If you are unable to pick up your problem set in class, you may pick it up at my office.

If you have any question on the problem sets, please ask the TA or me during our office hours. I would prefer to talk to you in person. If you do not have time to meet, you may also send your questions by e-mail, but note that e-mail is not an ideal medium for clearing up questions of understanding.

Examinations

There will be one midterm exam carrying a weight of 30%, and a final exam carrying a 50% weight. Both exams will be closed book. Bring a calculator which is capable of computing log and exponential functions. (Note: You should be able to find a suitable calculator for less than \$20 if you do not already own one.) You do not need to bring a blue book, but you may wish to bring your own paper as a supplement to the writing space provided on the exam.

There will be no make-up exams. If for some reason you miss the midterm exam, then the final exam will carry its weight. An exception will be made for medical emergencies, in which case a doctor's certificate is required. Please hand in the doctor's certificate in class or stop by my office.

The midterm exam will be given during regular class time (8:00 am - 9:20 am), on Tuesday February 13, 2007. The final exam is scheduled for Thursday March 22, 2007 from 8 - 11 a.m. The final will be cumulative, but there will be relatively more emphasis placed on the material covered in the second half of the course. The final exam is a firm requirement for completing the course.

Grading

All grading problems must be rectified within a week from the time a graded exam or assignment is returned.

- Re-grading of exams will not be allowed if they were written in pencil. Please address exam re-grading requests to me.
- If you have any questions or complaints regarding the grading of problem sets, please resolve them with the reader who graded the assignment.

Course grades will be computed as follows. First, if the mean score of an exam is below 75 percent, points will be added to all scores to bring the mean for that exam up to 75. Second, a weighted average of numerical scores will be obtained. Suppose your scores on the problem sets are 90, 90, 90 and 90. Further, assume your midterm and final exam scores are 80 and 85 (after possible adjustment), respectively. Then the final course average is computed as the weighted average rounded to the nearest integer: $90*5\%+90*5\%+90*5\%+90*5\%+80*30\%+85*50\% = 84.5 \Rightarrow 85$. The weights on the problem sets, midterm and final exam cannot be changed. Finally, letter grades will be assigned using the following scale:

≥ 95 A+	[80,85) B+	[65, 70) C+	[50 55) D
[90,95) A	[75,80) B	[60, 65) C	< 50 F
[85,90) A-	[70,75) B-	[55, 60) C-	

Note that the scale is exact¹. So if your average score is 84.5, you will get an A-. Grades very close to the boundary might be rounded up if the student is an active participant in class.

I will not assign letter grades on the midterm. However, you can refer to the above table to see where you stand.

E-mail and Office Hours

Instructor: Stephen Stohs sstohs@ucsd.edu

Office Hours: Immediately following class meeting time, otherwise by appointment. NOTE: We can meet by appointment in my department office at 108 Econ, but normally I conduct office hours at the Mandeville Coffee Bar (near Center Hall).

TAs: Justin Rao (jmrao@ucsd.edu) and Therese Scharlemann (tscharle@ucsd.edu)

Reader: Timothy Keller (tkeller@ucsd.edu)

TA office hours will be scheduled in class.

Course Outline

<u>Basic Topic</u>	<u>Text Readings</u>
Four Economic Questions about Global Warming	Ch 1
Ethics and Economics	Ch 2

¹ If the average point total by chance rounds exactly to 0.5 below the low end of a grade range, it will be rounded up.

Pollution and Resource Degradation as Externalities	Ch 3
The Efficiency Standard	Ch 4
The Safety Standard	Ch 5
Sustainability: A Neoclassical View	Ch 6
Sustainability: An Ecological View	Ch 7
Measuring the Benefits of Environmental Protection	Ch 8
Measuring the Costs of Environmental Protection	Ch 9
Benefit-Cost in Practice: Implementing the Efficiency Standard	Ch 10

Midterm

Tuesday February 13, 2007

The Political Economy of Environmental Protection	Ch 12
An Overview of Environmental Legislation	Ch 13
The Regulatory Record: Achievements and Obstacles	Ch 14
Monitoring and Enforcement	Ch 15
Incentive-Based Regulation: Theory	Ch 16
Incentive-Based Regulation: Practice	Ch 17
Promoting Clean Technology: Theory	Ch 18
Promoting Clean Technology: Practice	Ch 19
The Economics of Global Agreements	Ch 23

Final Exam

Thursday March 22, 2007, 8-11am