ECO/ENV 4323: Environment & Economic Analysis
Spring 2008

Administrative Information

Instructor: Dr. Tisha Emerson
Office: HCB 367
Office hours: TR 11:00am-12:30pm, W 10:00am-12:00noon, and by appointment
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Lecture: TTh, 12:30-1:50pm, HCB 305

Course Outline

***Principal Aim of the Course*:** This course examines economic issues in the consumption, allocation, and management of environmental resources. Students will learn the economic principles behind the management of the environment. Readings, problems, and a short paper will give students practice in applying economic tools to environmental problems. The course includes critical discussions of the more controversial issues in environmental economics: environmental valuation, solid and toxic waste, and regulation.

Methodology: The course is methodological in emphasis. We will use both theoretical and empirical approaches to solve problems in class and students will use similar approaches in problem sets, exams, and the short paper.

Learning: To fully gain from the class, good learning techniques are to be adopted. These are regular attendance, continuous reading and frequent practice at applying the theory that you have learned. Good preparation includes keeping up with the reading and studying class notes from the previous period prior to attending class. A premium is placed on logical thinking, to use what you have learned to work through a problem that you may not have seen before; rote memorization is not enough. The following policies regarding assignments, attendance, and grading are aimed at promoting good learning, and the most effective use of class time. ***These policies are administered without exceptions for individual students. This is to insure that ALL students are treated equally.*** *Further, all students are expected to follow the honor code and to conduct themselves with honest and integrity. If you are not familiar with the honor code, see the Student Handbook (http://www.baylor.edu/honorcode/index.php?id=44060).*

Text: Callan and Thomas' *Environmental Economics and Management: Theory, Policy, and Applications*, 4th edition (2007, Thomson South-Western). The University Bookstore has this text in stock. Each student is expected to acquire a copy of the text. The chapters we will be covering will be mentioned in class, and are indicated on the course schedule that follows. Please note that simple definitions and concepts will not be covered in class, but you are expected to learn these materials through your reading. This allows more time for explaining more complex concepts and practicing applying theories learned in class to current issues. Students are expected to read the assigned chapters and articles ahead of time and be prepared to discuss them during class time. Make good use of your text, it is a valuable resource!

Blackboard. An additional resource available to students is the class Blackboard site. Blackboard can be accessed at the following address http://my.baylor.edu. Through this site students have 24-hour access to a great deal of information on the class. Items available through the site include but are not limited to the syllabus, problem sets, short paper description, readings, and answer keys. Also, through e-mail you have greater access to the instructor. E-mailed questions are usually answered within 24 hours as I frequently check my e-mail. Technology is a wonderful thing – make use of this resource!

Problem Sets. For each class meeting, work will be assigned. These include reading and/or written assignments (problems, short paper, etc.). Students are required to prepare written assignments (which are available on the class Blackboard site) *in advance* of the class meeting, and must bring the prepared assignments to class. Students are responsible for the full assignment. *No late assignments will be accepted.* Grading of each individual problem set will be on a pass/fail basis. You must get at least 60% of the problem set correct to receive a grade of "pass" on any individual problem set. At the end of the semester, your problem set score (out of a total of 60 points possible) will be calculated as the percentage of passing grades your received multiplied by 60. For example, suppose you received a passing grade on 7 of the 8 problem sets (87.5%), then you would receive a 52.5 out of 60 for your problem set score for the semester.

Short Paper. Students are required to write a short paper, 3-5 pages in length (not including references), on a specific environmental issue of their choice. The paper will comprise of several parts which will each be graded. The total project will be worth 40 points. A full description of the paper assignment will be distributed separately and will also be available via the class Blackboard site.

Exams. The midterms and final exam will each consist of several short essay/problem questions like those found in the textbook and in problem sets. The final exam will be cumulative.

Attendance. Students are expected to attend *all* scheduled lectures. Students are expected to be on time for class and stay for the entire period. If your schedule does not allow this, *do not take this class*. Students may not leave early unless permission is granted *before* class starts. No tape recording is allowed for any purpose, because part of good learning includes taking one's own class notes. Furthermore, you should note that the policy of the university requires that students attend at least 75% of all class sessions in order to receive credit for a course. This policy (as all university policies) will be strictly adhered to and thus any student accumulating 8 or more absences will receive a failing grade for the course ***regardless*** of their performance on written assignments and exams.

Grading. Grades are based on two midterms, a final, and written assignments. There are a total of 400 points possible throughout the semester distributed as follows: final (100), midterms (100 points each for a total of 200), problem sets (60), and short paper (40). In general, final grades are assigned following a standard grading scale (e.g. 90-100 A, 80-89 B, etc.). Your final score in the class is calculated as the percentage of the total possible points that you earn (e.g. if you earn 350 points out of the 400 possible, you have earned an 87.5).

Missed Work: Students are required to submit all written assignments and to take all exams. Late work will not generally be accepted. If you should miss a midterm, it will be treated in one of two ways. You may provide written, credible evidence from a professional explaining why you did not take the midterm. An example is a doctor's letter indicating that you saw the doctor **on the day of the midterm** or a police report (**with the date of the midterm on it**) explaining the circumstances surrounding your absence. You must also provide a phone number for the person who wrote the explanation for me to contact (and I will call). If you miss a midterm with credible evidence explaining your absence, you will receive the average of the other midterm and the final exam (adjusted to a 100 point scale) in place of the midterm you missed. Absent written and telephone explanations, you will receive a zero for the midterm. If you were to miss more than one midterm with legitimate excuses, an incomplete will be issued to you for the course. No matter what the reason, there will be no excuse accepted for missing the final exam; a student missing the final exam will receive a grade of zero.

Tentative Schedule of Topics, Assignments and Exams

Schedule. Eight problem sets, a short paper, two midterms, and a final exam are scheduled. The midterm exams are held in class on the dates indicated and the problem sets are due on the indicated dates – all dates are given in the ***tentative*** schedule below. The chapter numbers refer to the text: Callan and Thomas' *Environmental Economics and Management: Theory, Policy, and Applications*, 4th edition (2007, Thomson South-Western).

** Please note that this is a **tentative** schedule and may be adjusted if the progress of the class warrants such a change. If any adjustments are made, these will be announced in class.*

Week by Week*

Week 1		Reading Assignments & Due Dates
1/15	Introduction to Eco 4323	Portney (JEP 2000); Dasgupta (2007)
1/17	Role of Economics in Environmental Management	Chapter 1
Week 2		
1/22	Modeling the Market Process: A Review of the Basics	Chapter 2
1/24	Modeling the Market Process continued	Chapter 2
Week 3		
1/29	Modeling Market Failure	Chapter 3
1/31	Modeling Market Failure continued	Chapter 3 **Problem Set 1 due**
Week 4		
2/5	Conventional Solutions to Environmental Problems: The Command and Control Approach	Chapter 4 **Part (i) of Short Paper due**
2/7	Economic Solutions to Environmental Problems: The Market Approach	Chapter 5 **Problem Set 2 due**
Week 5		
2/12	Economic Solutions to Environmental Problems continued	Chapter 5; Barthold (JEP 1994)
2/14	Economic Solutions to Environmental Problems continued	Chapter 5; Hahn (JEP 1989); Schmalensee et al. (JEP 1998); Stavins (JEP 1998)
Week 6		
2/19	Fighting Goliath: Texas Coal Wars (movie)	**Part (ii) of Short Paper due**
2/21	Review for Midterm 1	**Problem Set 3 due**
Week 7		
2/26	***Midterm I***	Chapters 1-5, readings
2/28	Environmental Risk Analysis	Chapter 6
Week 8		
3/4	Environmental Risk Analysis continued	Chapter 6; Chichilnisky and Heal (JEP 1993); Menell (JEP 1991)
3/6	Assessing Benefits for Environmental Decision Making	Chapter 7
3/10-3/14	***Spring Break***	

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Week 9		
3/18	Assessing Benefits for Environmental Decision Making continued	Chapter 7; Portney (JEP 1994); Hanemann (JEP 1994); Diamond and Hausman (JEP 1994) **Part (iii) of Short Paper due**
3/20	Assessing Costs for Environmental Decision Making	Chapter 8 **Problem Set 4 due**
Week 10		
3/25	Assessing Costs for Environmental Decision Making continued	Chapter 8; Porter and van der Linde (JEP 1995); Palmer et al. (JEP 1995) **Problem Set 5 due**
3/27	Benefit-Cost Analysis in Environmental Decision Making	Chapter 9
Week 11		
4/1	Benefit-Cost Analysis in Environmental Decision Making continued	Chapter 9; Freeman (JEP 2002)
4/3	Review for Midterm 2	**Problem Set 6 due**
Week 12		
4/8	***Midterm 2***	Chapters 6-9, readings
4/10	Managing Hazardous Solid Waste and Waste Sites	Chapter 17
Week 13		
4/15	Managing Hazardous Solid Waste and Waste Sites continued	Chapter 17; Stafford (LandEcon 2000); Stafford (JEEM 2002)
4/17	**Diadeloso**	
Week 14		
4/22	Managing Municipal Solid Waste	Chapter 18; Kinnaman (JEP 2006) **Problem Set 7 due**
4/24	Controlling Pesticides and Toxic Chemicals	Chapter 19
Week 15		
4/29	Controlling Pesticides and Toxic Chemicals	Chapter 19; Khanna et al. (JEEM 1998); Shapiro (JPAM 2005)
5/1	Course Review	**Problem Set 8 due** **Part (v) of Short Paper due**
Week 16		
5/8	***Final Exam, Thursday, May 8th, 9:00-11:00am***	Chapters 1-9, 17-19, readings

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Final note

The policy of the Business School is that no food or drink (other than water) is allowed in classrooms. This policy will be strictly enforced so as to maintain the quality of our facilities. Thank you in advance for your cooperation.