Environmental Economics

Economics 212
Fall 2011

Professor Drennen
Office: Stern Hall 314
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Office Hours:
Wednesday 12:00 – 2:00
Thursday 1:30 – 3:00
(Or by Appointment)

Course Prereqs: Econ 160 or Econ 120 or Env 110 (Energy)

Course Description: The first time I heard the phrase "environmental economics", I was both skeptical and intrigued. I was skeptical about the concept of applying economic principles to solving environmental and other social issues. After all, economics is all about profit maximization and other related principles. How could *that* have anything to do with protecting the earth?

And yet, my first course in economics also opened my mind. As an engineer, I could *design* systems that might solve some environmental issue but my training told me nothing about whether society would embrace the technological solution. In the end, success would depend not on the beauty of the technological solution but on other factors, such as economics and politics. Finding winning solutions to the complicated issues affecting the environment requires a strong interdisciplinary approach; economics provides us with important principles for designing *solutions that will work*.

The main goal of this course is to demonstrate it is possible to solve environmental problems by applying economic principles. Throughout the course, we will move back and forth between theory and practice: learning how basic principles from economic theory can be applied to environmental questions and then looking at how these principles have been used to implement policy nationally and internationally. By the end of the semester, I hope that each of you will be able to apply simple economic principles to understanding why things are as they are around you and to begin to think how these principles can be used to make positive changes.

Successful completion of this class will require substantial preparation by the student. Students should prepare for lectures by reading the assigned chapters prior to class. Finally, I encourage students to make use of my office hours or to email me at any time to discuss issues raised in class. As I frequently rely on email for communicating with the class, **you'll need to check your HWS email account on a regular basis**.

Required Books:

David Anderson, "*Environmental Economics and Natural Resource Management",* Third Edition, 2010.

"*The Post Carbon Reader: Managing the 21st Century's Sustainability Crisis",* R. Heinberg and D. Lerch, editors, 2010.

The *Post Carbon* reader is not available at bookstore. It is available as paperback or digital download at Amazon.com: (http://www.amazon.com/Post-Carbon-Reader-Managing-Sustainability/dp/0970950063/ref=sr_1_1?ie=UTF8&qid=1314115347&sr=8-1).

Exams: There will be two exams (**Thursday, October 6 and Tuesday, November 8)**. No make-up exams will be given. Material for the exams will come from class lectures, assigned readings (whether or not covered in class), and assignments.

Homework: Homework will be assigned regularly during the quarter. The due dates for the assignments are listed in the class schedule. Late homework will be penalized 10% per day; it will not be accepted once turned back in class.

The Final Project: Introducing an Environmentally Superior Alternative

Many of our readings do a great job of highlighting problems and possible solutions. The Post Carbon reader mentions what it would take, for example, to avoid catastrophic climate change. Can society create solutions in time to avoid the type of warming trends scientists warn could happen as we continue pumping CO_2 and other greenhouse gases into the atmosphere? For your final project, students will work in groups of three to design environmentally superior alternatives to some current market good or practice applying the principles from this class. While there are many ideas in the Post-Carbon reader, I'm looking for original ideas that could truly have an impact.

Grading:

Exam 1	20%
Exam 2	25%
Final Project	30%
Homework	15%
Class Discussion & Blackboard Participation	10%