

Environmental Economics

Economics 212

Fall 2008

Professor Drennen

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Office Hours:

Tuesday 10:00 – 11:30

Wednesday 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*”, Second Edition, 2006.

Michael Crichton, “*State of Fear*”, 2004.

Exams: There will be two exams (Thursday, October 2 and Thursday, October 30). 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 tentative due dates for the assignments are listed in the class schedule.

Emissions trading project: The emissions trading project is an intensive group project. The primary goal is to give students an in-depth understanding of how economic principles could be used to tackle a major environmental issue (climate change) and the practical problems in applying theory. This project will require students to work together in groups, both in and out of class, and submit a final group report. Each student will represent one country or region (industrialized countries, developing countries (outside China), former Soviet Union and Eastern Europe, and China) and will be expected to act as a representative for that country/region in negotiations on the permit system.

To fully appreciate the issues involved in setting up a system, we will cover the following issues in class: the science of global warming, economic theory of tradeable permits, and experience with tradeable permits. Issues that will likely arise in each group as the project progresses include: initial allocation of permits, trading rules, monitoring, and the long-run environmental impact of the trades.

Grading:

Midterm	20%
Final Exam	25%
Emissions trading project	30%
Homework	15%
Class Discussion & Blackboard Participation	10%