

ECON 373: Environmental Economics

Syllabus

Spring 2012

Instructor: Chrystie Burr

Class time: MW 8:00 - 9:15

Class location: McClelland Hall, Rm 133

Course Objective:

The goal of this course is to orient students with topics in Environmental Economics, the analytical techniques that policy makers adopt and the general problem solving skills. Student will be able to analyze basic environmental issues with economic methods and tools while strengthening team working and research skills at the end of the course.

Environmental Economics covers wide ranging topics from forestry on the land, to fisheries in the ocean, up to the air pollution and further more incorporating the whole earth system in the studies of climate change. We will focus on limited topics during this course and to apply economic theories to explain the root of the problems. We will conduct a careful study of the analysis of environmental policies which includes cost-benefit analysis and pollution permit trading. I will implement the most current environmental issues and policies as examples during the course.

Textbook: Charles Kolstad, Environmental Economics

Course Requirements:

6 Assignments are due in the beginning of the class one week after they are assigned.

2 Midterms: Wednesday, Feb. 15, 2012

Wednesday, April 18, 2012

2 Group Presentations

- a. On case studies of Corporate Social Responsibilities: Feb. 29, March 5
- b. Final presentation on one selected topic: April 30, May 2

Grading Criteria:

HW: 15%

In-Class Participation: 5%

Midterms: 40%

Case Study Presentation: 10%

Final Presentation: 30%

Academic Code of Conduct: The point of higher education other than providing you with higher salaries in the future, it is also a time to develop higher moral standards. It is important for you to realize when you don't understand something, it is the best opportunity to learn. After all, I assume that's why you are here taking classes. It's also important to learn to manage your time. Start the homework as early as possible and review for the midterm at least one week ahead of the time. There is *zero tolerance* policy on cheating. If there are clear repetitions in the assignments, zero point is given to that assignment. If cheating activity occurs during the exams, the student WILL receive zero for the exam.

It's also important to cite your source while writing otherwise it becomes plagiarism. Use Chicago Manual of Style (CMS) when writing reference. You can use the following link to learn the format:

<http://owl.english.purdue.edu/owl/resource/717/01/>

There will be no electronic devices allowed during the lectures (unless you are using the laptop during your presentation). The class time is a little too early for Facebook and it's also a better idea to be awake enough to engage in online shopping.

### Course Outline

Lecture #	Date	Title	Assignments
1	1/11	Introduction	Ch. 1 up to p.10
2	1/18	Market optimality	Ch. 4
3	1/23	Welfare Economics	Ch. 4; HW 1
4	1/25	Negative Externalities	Ch. 5
5	1/30	Public Goods	Ch. 5; HW2
6	2/1	Property Rights	Ch. 13
7	2/6	Social Choices	Ch. 3; HW 3
8	2/8	Risk and Uncertainties	Ch. 18
9	2/13	Current Environmental Issues	
10	2/15	Midterm I	
11	2/20	Corporate Social Responsibilities	Ch. 17, Notes
12	2/22	Domestic and International Environmental Institutions	Notes
13	2/27	Environmental Policies	Ch. 11, Ch. 12;
14	2/29	CSR case study presentation I (group 1-7)	HW 4
15	3/5	CSR case study presentation I (group 8-12)	
16	3/7	Analytical Tools I – Market Valuation, CBA	Ch. 6, 7
17	3/19	Analytical Tools I – Market Valuation, CBA	Ch. 8, 9; HW 5
18	3/21	Analytical Tools II - Modeling	Ch. 10, Notes
19	3/26	Biofuels	Notes
20	3/28	Pollution Controls (Case Studies)	Ch. 1, Ch. 16, Notes
21	4/2	Renewable Energy Technologies I	Notes; HW 6
22	4/4	<del>No Class</del>	
22	4/9	Renewable Energy Technologies II ( with Guest Speaker)	Notes
23	4/11	Climate Change I	Ch. 2, Notes
24	4/16	Climate Change II	Notes
25	4/18	Midterm II	
26	4/23	Fishery and Forestry, Fuel Efficiency Standards	Notes
27	4/25	International Environmental Issues and Treaties	Notes

28	4/30	Final presentations	
29	5/2	Final presentations	

References:

Field, Barry and Martha Field. *Environmental Economics: An Introduction*. 5<sup>th</sup> ed. Boston: McGraw-Hill Irwin, 2009.

Tietenberg, Tom and Lynne Lewis. *Environmental & Natural Resource Economics*. 8<sup>th</sup> ed. Boston: Pearson Addison Wesley, 2009.

Topics

Market optimality (chapter 4 page 66 in Field and field; page 25 in Tietenberg)

Oral Presentations:

I. Case studies on Corporate Social Responsibilities:

Each assigned group will need to research (possibly through internet or phone interviews) on the company that they choose to present. Each group has 10 minutes to conduct a PowerPoint presentation (80%) to cover on the topics of i) company and its industry overview, ii) types of CSP activities that the firm currently engaged in, iii) dollar amount invested in CSR, iv) comparison to overall firm's operation and past histories, and v) why it is important for this particular firm engage in CSR.

Right before the presentation a written summary (20%) need to be turned in including the group member's names and answers that address the above questions.

Company list:

General Motor	Honda
Danone	McDonald's
Coca Cola	Pepsi
WalMart	Bank of America
Intel	ExxonMobil
Raytheon	AT&T

II. Final presentation

Each group (your choice) has 15-20 minutes to present an environmental economics relating topic (50%). The presentation will be judge on organization, depth of analysis, breadth of coverage and synthesis of findings as well as delivery. A written report (40%) (4-5 pages: 12 pts 1.5 line-spacing, 1" margin) is required for each group. In addition to the content, you also need to indicate in the paper which member is responsible for which activity – research, slide making, presenting, or doing write-up.

One page proposal (10%) is due on **April 11** in class which provides: (1) title of the project, (2) the scope of the project (research questions, coverage, etc.), (3) a tentative outline of the final report and a tentative bibliography of sources you will be using. This proposal

should reflect sufficient knowledge of the literature that you can specify both the subjects to be covered and how they fit together. I will make comments and provide suggestion for improvement.

Possible Final Presentation Topics:

The topics listed here are not designed to limit your possibilities, but rather to indicate the range of possible topics. You can choose from the list or come up with a topic on your own. Each topic can be chosen by only one group.

International Environmental Agreements: What Can Game Theory Model Tell Us?

Environmental Capitalism: Can Acting Sustainably be Profitable for Firms?

Electricity Deregulation: What have been the Economic and Environmental Impacts?

Pricing Traffic Congestion

The Economics of Marine Reserves

Population as a Source of Environmental Degradation: What is the Evidence?

The "Tragedy of the Commons" Revisited: What Have We Learned?

The Environmental Kuznets Curve: A Solution to the Poverty/Environment Connection?

Renewable Portfolio Standards and Clean Energy Standards

Subsidies for Renewable Energies: Is American Really As Apple Pie?

The Economics of Sustainable Agriculture

Pricing Water: What Have We Learned?

Does the Regulation of International Trade to Protect Endangered Species Do More Harm than Good?

Strategies for Protecting Endangered Species: Approaches and Results

The Future Renewable Energies

Decision Making under Uncertainty: Application to Climate Change

Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC

Climate Change and Adaptation

Green GDP

Feed-in Tariff in the U.S.

How Can Environmental Regulation Enhance Innovation and Competitiveness?