

COURSE SYLLABUS

COURSE NAME AND NUMBER Environmental Economics (EEP 320)
DAYS AND TIMES Tuesdays & Thursdays, 2:40pm – 4:00pm
LOCATION 1145 Engineering Building

INSTRUCTOR Dr. Robert Richardson
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OFFICE 310A Natural Resources
OFFICE HOURS Wednesdays 10:00am – 12:00pm (or by appointment)

COURSE DESCRIPTION

This course addresses analytical methods for evaluating economic impacts of environmental policies and understanding the economic causes of environmental problems.

COURSE OBJECTIVES

This course introduces students to environmental resources, economic efficiency, and market failures in the context of environmental policy. Specifically, students will be able to understand and explain:

- The economic causes of environmental problems
- The effects of positive and negative externalities in the allocation of environmental resources
- Attributes of the range of policy instruments available to correct for externalities
- The total economic value of environmental resources, including the methods of valuation
- The tools for analyzing the benefits and costs of environmental policies
- The economic implications of climate change

PREREQUISITES EC 201 and EEP 255

TEXT *Economics and the Environment*
 Eban S. Goodstein
 John Wiley & Sons, Inc., 2008, 5th edition

Additional reading assignments will be placed on the course ANGEL site, which can be accessed at <http://angel.msu.edu>.

RESOURCES Environmental Economics blog: www.env-econ.net
 Ecological Economics blog: <http://forestpolicy.typepad.com/ecoecon>
 Overview: The Model of Supply and Demand:
www.ingrimayne.com/econ/DemandSupply/OverviewSD.html

EVALUATION	Participation, preparation, and discussion	10%
	Midterm exam	30%
	Group project	20%
	Final exam	40%

Final course grades will be assessed according to the following scale:

4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.0
93-100	88-92	83-87	78-82	73-77	68-72	60-67	< 60

PARTICIPATION, PREPARATION, AND DISCUSSION

Students are expected to be present and prepared, and to actively participate in class discussions. Please read assignments before class and be prepared to describe the main themes of the readings and present your own discussion questions. Failure to be prepared for class will be readily apparent to the instructor and other students, and will result in a lower course grade.

GROUP PROJECT

Groups of 4-5 students will select and study an environmental problem. Groups will prepare and deliver a 20-25 minute presentation on an environmental policy or legislation. The policy or legislation may be currently existing, proposed, or hypothetical. The presentation may consider the following issues:

- 1) What is the problem and how would it be measured?
Briefly describe the issue/problem that created a need for a policy or new legislation. Discuss the background information about the various aspects of the problem, such as its geographic range, the affected population, extent of the problem (ecologically, economically). Where would you find data to measure the problem or value? What methods are available to analyze the issue?
- 2) Why does the problem occur?
Is the issue related to a public good or a market good? What sorts of market failures are associated with the problem? What economic reasons or factors explain why the problem exists?
- 3) What kind of policy or legislation might be used to address the problem?
Discuss the policy or legislative action (e.g., education programs, abatement subsidies, taxes, regulations, etc.). Describe the objectives of the action. In particular, how does the legislation mandate that the problem be addressed? Do you think the legislation promotes economic efficiency? Why or why not? Have there been any analyses of the policy? What type of information is needed to do a thorough analysis?
- 4) How could the policy or legislation be improved?
Describe the properties of an efficient outcome. Given these properties, what sorts of policy instruments could be used to bring about an efficient outcome? Is there any way that existing policy instruments could be modified to improve economic efficiency? Discuss the effects on social welfare. Finally, what practical limitations (if any) to implementing an efficient policy may exist?

Groups will have broad latitude in selecting topics. Examples may include measuring the economic impact of some change in environmental quality, measuring the social costs of some polluting activity, estimating the value of the benefits of environmental protection, proposing a new law, or tightening environmental regulations. Presentations should focus on the economic aspects of the issue. Where data are not available, groups should explain in detail how the relevant information would be collected.

Presentations should be made using PowerPoint or other visual display. An electronic copy of the presentation, along with a list of references, should be submitted.

Each group member is expected to contribute fully to the assignment. If shirking and evasion becomes a problem, a member may be expelled by a group vote and assigned an onerous individual project (don't let this happen!).

EXAMS

Students will write one midterm exam on Thursday, February 28 in class and one final exam on Monday, April 28, 3:00-5:00pm. The format will include short essay and analytical problem questions.

ACADEMIC HONESTY

Students are expected to adhere to high standards of integrity and honesty. Any form of dishonesty or plagiarism with regard to assignments or examinations will not be tolerated. Please see MSU Regulations, Ordinances and Policies Regarding Academic Honesty and Integrity at <http://www.msu.edu/unit/ombud/RegsOrdsPolicies.html>. Please see MSU's policy on plagiarism at <http://www.msu.edu/unit/ombud/plagiarism.html>. The University policy on academic dishonesty is provided in the Student Handbook and Resource Guide, which can be downloaded from: <http://www.vps.msu.edu/SpLife/>.



EXPECTATIONS


Class Attendance: Class attendance is considered to be an important part of a student's educational experience. Students are expected to arrive on time for every class meeting.

Classroom behavior: The following classroom behaviors are not acceptable: excessive and/or loud talking with other students, disruptive arrivals and exits, answering cell phone calls, using text/instant messaging, and other distracting behaviors. Ringing cell phones during class are unacceptable. If you are expecting a call in an emergency situation, please inform the instructor before class, and set your phone to alert you silently.

Mutual respect: In order to create a positive atmosphere for open discussion, students should feel confident that they can express their views and perspectives freely without penalty and that their comments will not be attributed to them outside the classroom. Trust and respect should permeate this class.

COURSE SCHEDULE AND TOPICS

Week	Date	Topic	Reading
1	January 8	Course introduction	
	January 10	Global warming	Chapter 1
2	January 15	Ethics and social welfare	Chapter 2
	January 17	Pollution	Chapter 3
3	January 22	Efficiency	Chapter 4
	January 24	Efficiency (<i>continued</i>)	
4	January 29	Safety standard	Chapter 5
	January 31	Climate change: Focus the Nation	
5	February 5	Benefits	Chapter 8
	February 7	Valuing benefits	
6	February 12	Costs	Chapter 9
	February 14	Cost estimation	
7	February 19	Benefit-cost analysis	Chapter 10
	February 21	Benefit-cost analysis in practice	
8	February 26	Group assignment discussion, exam review	
	February 28	Midterm exam	
9	March 4	☺ ☀ spring break ☀ ☹	
	March 6	♪ ☀ spring break ☀ ♪	
10	March 11	Sustainability	Chapter 6
	March 13	Views of sustainability	Chapter 7
11	March 18	Environmental legislation	Chapter 13
	March 20	Monitoring	Chapter 15

Week	Date	Topic	Reading
12	March 25	Incentive-based regulation: theory	Chapter 16
	March 27	Incentive-based regulation: practice	Chapter 17
13	April 1	Global agreements: climate change	Chapter 22
	April 3	Pollution trading game	
14	April 8	Clean technology	Chapter 18
	April 10	Climate change conference (details to follow)	
15	April 15	Group presentations	
	April 17	Group presentations	
16	April 22	Poverty and population	Chapter 20
	April 24	Course review	
17	April 28	FINAL EXAM	Monday, 3:00-5:00