

Introduction to Environmental Economics and Policy

AEC 250

Summer Session 2 2017

Instructor:	Jason Beasley Department of Applied Economics Email: beasleyw@oregonstate.edu		
Class Meetings:	M T W R	2:00pm – 3:50pm	STAG 113
Office Hours:	M T W R	12pm-1pm (or by appointment)	
Pre-Quiz Office Hours	F	10am-12pm	
Office Location:	Ballard Extension Hall 319A		
Course Website:	Canvas		

Course Description

This course is focused on the application of microeconomics to environmental problems. The environmental problem of climate change will provide a focal set of applications of microeconomic principles. The course can be thought of as being divided into three sections. The first section will develop an understanding of rational choice theory, supply and demand, and price formation. The second section focuses on important applications of microeconomics to the environment, focusing on the policy problem of pollution control. The third section focuses on behavior of firms, with an emphasis on the implications of that behavior for the environment.

Objectives

- Analyze market behavior through repeated application of the supply and demand model.
- Analyze environmental and government policy through application of the supply and demand model.
- Examine the economic rationale for intervening in free markets to achieve environmental objectives.
- Examine and apply economic models of alternative market structures.

Measurable Student Learning Outcomes

Learning outcomes in AEC 250 will be measured by student performance on numerous homework exercises and three written examinations. Upon course completion, students will be expected to:

1. Use the supply-and-demand model to analyze and explain market equilibrium concepts.
2. Use the supply-and-demand model to analyze environmental and government policy interventions on market equilibrium.
3. Describe the economic benefits and costs associated with environmental policy.
4. Compare and contrast economic and environmental outcomes associated with markets that vary by degrees of competitiveness.
5. Apply the core models of microeconomics to an on-going analysis of the environmental problem of climate change.

This course satisfies the Baccalaureate Core, Perspectives, Social Processes, and Institutions with the following learning outcomes as defined by the university

1. Use theoretical frameworks to interpret the role of the individual within social process and institutions
2. Analyze current social issues and place them in historical context(s)
3. Critique the nature, value, and limitations of the basic methods of the social sciences

Required Books

Principles of Microeconomics, 7e, N. Gregory Mankiw, Cengage Press.

Climate Casino, William Nordhaus, Yale University Press.

Grading

Your grade will be based on three quizzes, multiple homework assignments, class engagement and one comprehensive final exam. Exams and quizzes will cover material presented in class, assigned readings, and homework assignments. An

emphasis will be placed on material that we discuss in class, so class attendance is required for a satisfactory performance. The breakdown of grades is below:

- Homework 20%
- Participation 10%
- Quizzes (x3) 30% (10% each)
- Final 40%

Homework Assignments

There will be one homework assignment for every lecture. This amounts to 11 homework assignments overall. They will be due the following class period. I will drop the homework assignment with the lowest score when calculating the final grade. Homework assigned for Thursday's lecture will be due the following evening (Friday) by 5PM.

Quizzes & Exam

There will be three quizzes, that will take approximately 45 minutes each Monday (except the first day of class). The quizzes will be short enough to allow you to finish in the first half of one class, but will require a command of the major concepts from the prior week to perform well. The final exam will consist of the entire allotted exam time and will be comprehensive. I will not be able to provide a make-up final.

Tentative Course Schedule

M (6/26) Class Introduction / Opportunity Costs

Mankiw Ch. 1-3, Nordhaus Ch. 1

T (6/27) Supply and Demand

Mankiw Ch. 4

W (6/28) Supply and Demand / Intro to Elasticity

Mankiw Ch. 4-5, Nordhaus Ch. 3

R (6/29) Elasticity / Market Efficiency

Mankiw Ch. 5,7, Nordhaus Ch. 7,9

M (7/03) Quiz #1, Applications of S&D / Government Policies

Mankiw Ch 6.2, Nordhaus Ch. 8

T (7/04) No class: Independence Day

W (7/05) Externalities / Application of Externalities

Mankiew Ch. 10, Nordhaus Ch. 18,19

R (07/06) Externalities, Intro to Costs of Production

Mankiew Ch. 10, Nordhaus Ch. 18,19

M (7/10) Quiz# 2, Costs of Production, Competitive Markets

Mankiw Ch. 13, 19

T (7/11) Firms in competitive markets

Mankiw Ch. 14, Nordhaus Ch. 19

W (7/12) Firms in Competitive Markets / Monopoly

Mankiw Ch. 14-15, Nordhaus Ch. 19

R (7/13) Monopolistic Competition

Mankiw Ch. 16

M (7/17) Quiz #3, Monopolistic Competition

Mankiw Ch. 16

T (7/18) Economics of co-operation & oligopoly

Mankiw Ch. 17

W (7/19) International climate change agreements / Review

Nordhaus Ch. 21

R (7/20) Final

Statement Regarding Students with Disabilities

Accommodations are collaborative efforts between students, faculty and [Disability Access Services \(DAS\)](#) with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Expectations for Student Conduct

Student conduct is governed by the university's policies, as explained in the [Office of Student Conduct: Information and Regulations](#).

Academic Integrity

Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit [Avoiding Academic Dishonesty](#), or contact

the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:

(i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.

(ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.

(iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).

(iv) TAMPERING - altering or interfering with evaluation instruments or documents.

(v) PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.