

Economics 436
Environmental Economics
Syllabus
Spring 2021
Prof. Robert Halvorsen

ECON 436 analyzes the relationship between economic activity and environmental quality. The major topics considered are the economic origins of environmental problems, the trade-offs involved in determining the goals of public policy toward the environment, the choice of policy instruments to attain those goals, and the role economic analysis has played in the formulation of actual environmental policy in the U.S. By the end of the course, students should understand how to apply economic analysis to determine the optimal level of environmental quality, the circumstances under which a free market system will and will not result in optimal outcomes, and the advantages and disadvantages of alternative policy instruments for improving on market outcomes.

The prerequisite for this course is ECON 300 and the class discussions will assume that students have a solid understanding of intermediate level microeconomics. Two, non-cumulative, exams will count for 80% of the course grade, with the (curved) grade for the exam on which you do better receiving a weight of 0.7 in calculating the overall exam grade and the exam on which you do less well receiving a weight of 0.3. The exams will be open-notes. Last Quarter's exams are posted on Canvas as a preview of the types of questions that will be asked as well as sources of practice questions in studying for this Quarter's exams.

Six problem sets will count for 20% of the course grade and will be graded credit/no credit. Detailed answer sheets will be posted for the problem sets. Reviewing the answer sheets and comparing them to your own answers are excellent ways to learn the course material.

Exams and problem sets do not need to be typed but do need to be easy to read. They must be submitted to Canvas as PDFs. If you do not have access to a scanner, you can use a cell phone scanning app (e.g., Adobe Scan).

My office hours are on Monday from 3:30 – 4:30 p.m. An appointment to meet at another mutually agreeable time can be made by email at halvor@uw.edu. You may also use email to ask any short-answer questions that may arise as you review your notes or work on the problem sets.

Washington state law requires the UW to have a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/) (<https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/>).

Course Schedule

All dates except for the final exam are subject to revision.

March 29 th	Lecture 1: Introduction
March 31 st	Lecture 2: Coase Theorem
April 5 th	Lecture 3: Policy design when MB and MD curves are known Problem Set 1 Due
April 7 th	Lecture 4: Policy design when MB and MD curves are not known
April 12 th	Lecture 5: Policy design when MB and MD curves are uncertain Problem Set 2 Due
April 14 th	Lecture 6: Policy design when MB and MD curves are uncertain
April 19 th	Lecture 7: Distributional effects of environmental policies
April 21 st	Lecture 8: Economic theory of policy evaluation Problem Set 3 Due
April 26 th	REVIEW FOR MIDTERM EXAM
April 28 th	MIDTERM EXAM
May 3 rd	Lecture 9: Government policy analyses
May 5 th	Lecture 10: Valuation of risks to life Problem Set 4 Due
May 10 th	Lecture 11: U.S. water and air pollution control policies
May 12 th	Lecture 12: Stratospheric ozone depletion
May 17 th	Lecture 13: Global climate change Problem Set 5 Due
May 19 th	Lecture 14: Global climate change
May 24 th	Lecture 15: Present value analysis
May 26 th	REVIEW FOR FINAL EXAM Problem Set 6 Due
May 31 st	MEMORIAL DAY
June 2 nd	FINAL EXAM COVERS MATERIAL SINCE MIDTERM EXAM.