

M134: Environmental Economics

Summer 2017 – Session A

Tue-Thur 10-11:50am, Location: TBA

1. Kahn Matthew, Fundamentals of Environmental Economics: Solving Urban Pollution Problems
2. Lecture Notes posted on class webpage.
3. <https://moodle2.sscnet.ucla.edu/course/view/171A-ECONM134-1>

Course Objectives:

The objective of this course is to introduce the fundamentals of the multidisciplinary fields of environmental, urban, and natural resource economics

Course Content:

This course seeks to introduce students to various methods of internalizing externalities and analyzing private and public good aspects of environmental resources in relation to microeconomic efficiency principles. Emphasis is placed on designing incentives to protect the environment. Basic Microsoft Excel knowledge will be useful to analyze data to test hypotheses about pollution's causes and consequences. The course is open to all students who have completed a statistics course and have taken intermediate microeconomics **or** have received permission from the instructor. Those who already took an intermediate microeconomics course should review profit maximization rules under different market structures, supply derivation, as well as microeconomic efficiency principles prior to the first week of lectures. Those who have not taken any microeconomics classes should contact the instructor for permission and requirements for eligibility.

Grading:

Class Participation:

Topics that will be covered throughout the quarter occupy the front pages of news media everyday. We will follow current events and discuss them in class. Attending lectures and participating in class discussions make digesting the material much easier. Thinking about a topic within the context of a current event will force you to deepen your understanding. That way, you will be able to tap into your environmental economics knowledge even years after you complete this course.

You will be provided with news articles (via posted links on class website). You will get a chance to earn extra points during lectures via your participation in current event discussions!!!(to be added to your class grand point average.) You are encouraged to continue the discussions on the online forum.

Homework 20%:

Homeworks are going to be posted online. You will submit electronic files (PDF files only!). No hard copies will be accepted. No late submissions will be accepted. File name should have the following format: *assignmentname_lastname_firstname*. If the name of the person who is submitting the homework is Adam Smith and you are submitting Homework 1, the name of your file should be: *homework1_smith_adam*. Entire solution should be given in the submitted document including the methodology that is used. (For instance, giving only one number, say 43.56, as the

answer of a question is not acceptable even though it may be correct.) You can work on your homework as a group (up to 3 people). Only one copy should be submitted online with the names of all group members clearly appearing on the document.

Group Project 10% : Posted online under "Group Project" tab.

Midterm 30%: July 13th, Thursday at regular class time and location. Closed notes and book.

Final 40%: August 3rd, Thursday at regular class time and location. Cumulative. Closed notes and book.

Course Schedule & Topics

Week 1: Introduction to Environmental Economics

- Economics, Incentives, revisiting rational choice in relation to behavioral economics
- Building on Microeconomics
- Externalities in production and in consumption – Examples and graphical representation
- Implications of deadweight loss
- A steel factory's private and social optimal production level

Week 2: Externalities, Corrective Taxes and Cap&Trade

- Internalizing the externalities
- Corrective (Pigouvian) taxes
- Market based solutions to externalities – Coase Theorem and Cap&Trade

Week 3: Public versus Private Goods

- Public goods versus private goods
- Price determination for pure public goods
- Price determination and environmental implications of nonpure public goods
- Thursday - Midterm Exam (July 13th)

Week 4: Time Value of Money

- Time value of money
- Social versus private discount rate determination and implications for environmental policy

Week 5: Location Choice and Environment, Transportation Externalities

- Where do dirty factories locate?
- Where do people choose to live?
- Tiebout sorting

Week 6: Natural Resource Economics and Pricing the Unpriceables

- Optimal depletion of natural resources
- Estimating the price of environmental qualifiers

Final Exam: Wednesday, August 3rd, 10-11:50am, Location: Regular class.