Overview of Course and Learning Goals

This is a graduate-level course in Environmental Economics. We will assume an understanding of graduate-level microeconomics and econometrics, and students should have already successfully taken Foundations of Environmental Economics with Prof. Phaneuf.

The field of environmental economics is broad and growing, and the number (and breadth) of topics we will cover is large. My goal is to help students obtain a basic understanding of the literature and an introduction to the analytical models and empirical methods being used. An additional goal is to help identify potential research topics, so we will focus our attention (as possible) on papers that are of interest to the class. As such, we will rely heavily on readings, though I will still lecture from time to time. We will approach each topic with two goals in mind: to obtain a perspective of the literature, and to become familiar with the "state-of-the-art" theory and econometric tools used in the field.

An important goal of this course is to prepare students for a career as an environmental economist. Two indispensable skills are thinking critically about research, and communicating effectively regarding environmental economics research. The structure of the course is designed around developing these skills.

Course Structure and Assessment

Your grade will be determined by the following components and weights. Course grades will be determined based on the following scale: A=93-100%, AB=88-92%, B=83-87%, BC=78-82%, C=70-77%, D=60-69%, F=below 59%.

The course grade will be calculated as follows:

Discussion Leader: 30%
Participation: 10%
Referee Reports: 20%
Research Paper (or proposal): 30%
Research Presentation: 10%

1. Readings & Participation

Each student will be in charge of being a "discussion leader" for a subset of the papers (The schedule will be worked out in coordination with me in advance.). As the discussion leader, you will be in charge of leading the group through the discussion of the assigned reading. You will be assessed based on your understanding of the material, the clarity of your presentation, your willingness and ability to discuss the
readings clearly, and your demonstration that you can think critically about the research presented.

I expect that every student will come prepared for a thorough, in-depth discussion of the assigned readings. For every class you should come prepared to answer the following questions regarding the (required) readings: 1) What was interesting? 2) What was confusing? and 3) What could the author(s) have done differently/better? 4) What extensions of these papers would be interesting?

Before class (i.e. by 8:30 a.m. the day of class), email your answers to these four questions to me. This class will be largely discussion-based, so your participation and discussion is critical for success! These questions will help guide our discussion and serve as a commitment mechanism for you.

The participation portion of your grade will be determined by your participation in class discussions and the quality of your answers to the four questions above. It should be clear that you have read the assigned readings, have thought critically about the papers, and are prepared for class.

2. Referee Reports

Each student must submit 2 referee reports during the semester. A referee report should assess the research (question, contribution, methodology) and be helpful for the author(s). Students will be evaluated on the quality of their comments and the clarity of the report. This is good practice for what you may be doing in your career as an economist.

The papers and due dates will be announced in class.

3. Research Paper & Presentation

At the end of the semester students must submit and present a research paper (15 pgs, 1.5 spacing). The paper should identify a problem, clearly state the research question, and attempt to answer that question using theory and/or empirical methods. It should be clear to the reader how the proposed research fits into the broader literature and why it is an important contribution in environmental economics. This is meant to "jump-start" a research paper for your dissertation. Developing a *good* paper idea takes work and time, so start this early.

To help you along, we will have check-ins along the way through the semester. Check-ins will include

1) A description of your general idea. (2-3 minutes each, plus brainstorming time)

2) A 1 page writeup of your idea, which we will peer review in class.

3) An “egg timer” session, where each student has 5 minutes to present their idea.

Students will present their research to the class at the end of the semester. Presentations will be roughly 30 minutes long, including time for discussion. The presentation will allow for feedback on the research, which could then be incorporated into the final draft of the paper. The final draft of the paper will be due at the time determined by the Registrar’s Office (i.e. the time scheduled for the final exam).

The paper’s grade will be based on the overall quality of the research paper, including clarity of writing, the contribution to the field, and the appropriate use of analytical tools (e.g. an appropriate theoretical model and/or econometric approach).
Sample of Readings

Empirical Methods


Public Goods, Externalities, Market Failure


Market-Based Mechanisms


Regulation Under Uncertainty


* C.D. Kolstad, T. Ulen and G. Johnson, "Ex Ante Regulation vs. Ex Post Liability for Harm: Substitutes or Complements?", AER (Sept. 1990)
International/Transboundary Problems

* Fullerton, Karney and Baylis. "Negative Leakage."


State-Level Regulations


Equity and Regulations


Hedonics


Bayer, Patrick, Nat Keohane and Christopher Timmins. 2009. Migration and Hedonic Valuation: The Case of Air Quality. JEE.


Environment, Health and Mortality


* Currie, Janet and Matthew Neidell. "Air Pollution And Infant Health: What Can We Learn From California’s Recent Experience?," Quarterly Journal of Economics, 2005, v120(3,Aug), 1003-1030


Climate Change

Stern Review: The Economics of Climate Change, Executive Summary.


Nonpoint Pollution & Water


Energy and Energy Efficiency


Automobiles and Congestion Externalities


Maximilian Auffhammer and Ryan Kellogg, "Cleaning the Air? The effects of gasoline content regulation on air quality", AER 2010.


Miscellany


Property Rights, Political Economy and the Environment


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