ECON 9320. Environmental and Resource Economics II  
Spring 2019  
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Office Hours: Tuesday 2:00 – 3:30 or by appointment or by chance

Course Description

This class is one of two in the environmental economics field. The classes can be taken in any order.

This class will look at public goods and externalities in the context of environmental and natural resource problems. It will consider policy tools and other institutions for addressing these effects. It will also consider the problem of estimating people’s demand for environmental goods, necessary information for some policy approaches. Finally, it will consider applied evaluation of some policies.

The course’s objectives are to introduce you to environmental problems and policy solutions, to teach state-of-the-art econometric procedures for designing and evaluating policies, and to give you practice in the activities of professional research economists.

Required texts

The following book is required:


The following texts are recommended but not required:


In addition, there will be numerous readings assigned. Hard-to-come-by readings will be available on the iCollege page.
Grades

class participation  40%
referee report   10%
research proposal
  -intermediate deadlines  10%
  -final paper    30%
  -presentation  10%

Assignments will be marked down 1/3 letter grade for each day they are late.

Note on class participation

While some days will be predominantly lecture-based, others will be based on seminar-style
discussion of a paper or group of papers. On these days, students will be called on at random to
present a 10-15 minute overview of the paper, after which we will have a group discussion.
Thus, class participation is a critical part of the semester.

Readings marked with a double-star (**) are designated as student-led discussion. But students
are expected to be able to contribute to discussion for all papers marked with a * as well.

Note on writing assignments

We will have two writing assignments. The first assignment is a referee report. You must pick a
recent (within three years) working paper to review. Excellent places to find such papers include:

- the NBER environment/energy group
  http://www.nber.org/papersbyprog/EEE.html;
- the NBER environmental meetings
  http://www.nber.org/summer-institute/ → choose a year and search for the <eee> line;
- Resources for the Future (RFF)
  www.rff.org/research → look for documents labeled Discussion Paper
- Zew
  https://www.zew.de/en/publikationen/zew-discussion-papers/
  → Go to Environmental & Resource Economics in drop-down menu
- Fondazioni Eni Enrico Mattei (FEEM)
  http://www.feem.it/getpage.aspx?id=73&sez=Publications&padre=20&tab=1

But you are not limited to these. If you are thinking strategically the paper will be related to your
own research proposal (see below).

You must prepare a 1-page cover letter to the imaginary editor for whom you are reviewing the
document, summarizing the paper, evaluating its contribution and merit, and offering advice on
accepting or rejecting the paper. Separately, you must provide a 2-4 p. (single-spaced) review
which serves to give more details to the editor but also constructive comments to the author.
You should be clear about what you think is necessary and what you think are merely suggestions for improvement. Be limited in the latter if you are recommending acceptance or revision; you can be more forthcoming if you are rejecting the paper.

The second, bigger, assignment is a research paper. The nature of the assignment will depend on whether you're in your second year or third (or higher) year.

If this is your second year, you will prepare a research proposal. It must relate to the environment in some way. If you want to develop a project from the fall, please discuss with me.

The research proposal can be thought of as a building block to a real paper. As an exercise, it could also be thought of as practice for a grant proposal or your own dissertation proposal. It should pose a well-defined research question, motivated from the literature and/or policy problems, and accompanied by a conceptual framework for thinking about the question (i.e. a theoretical model and/or detailed empirical model). Then it should outline the steps that would be required for conducting the research, including the data that would be needed, and outline a plan for carrying it out. Finally, it might, if possible, have some preliminary work – perhaps summary statistics and rough cuts at the raw data (a comparison of means before and after an event, for example). The final document should be 10-20 pages double spaced, 12 pt. font, not counting tables and figures.

If this is your third year (or higher), you will write an actual paper. You should develop a project begun in another class or with your advisor. The final paper should be 20-30 pages double spaced, 12 pt. font, not counting tables and figures.

In either case, you will have intermediate deadlines of (i) choice of topic; (ii) 3 p. overview, with research question, 5+ citations to literature, statement of your contribution, and identification of data (if relevant); and (iii) a rough draft of your paper -- with remaining gaps acknowledged and discussion of your plans to fill them.

Writing assignments will be graded on your analysis, your application to questions of policy and academic interest, and your writing. The Writing Studio is a valuable resource for students who need help with their writing. All final writing assignments will be distributed to the entire class.

Deadlines

The deadlines for these assignments are as follows:

Feb 1 -- meet with me to discuss your research paper & your choice of paper to review
March 1 -- referee report due to me by 3 PM (email is fine)
March 8 – 3 p. version of research proposal due by 3 PM (email is fine)
April 5 -- rough draft of paper due to me by 3 PM
April 26 -- final paper due to me & entire class by 5 PM
May 2 -- class presentations during final exam time

Academic Honesty. Please see the Policy on Academic Honesty (Section 409).
Course Outline
** indicates student-led discussion
* indicates otherwise highest priority reading
◦ indicates optional reading

Introduction

Jan 15    Introduction to environmental economics

* Phaneuf & Requate, Chs. 1-3.

Externalities and Public Goods

Jan 17    Theory of externalities

* Phaneuf & Requate, Ch. 1
◦ Cornes & Sandler Chs. 3-4.

Jan 22    Non-rivalry, excludability, and Samuelson's theory of public goods

* Cornes & Sandler Ch. 6.

Jan 24    Commons and open access goods

* Cornes & Sandler §8.4 - 8.5.
Jan 29  Open access goods, cont'd


Jan 31  Coasean and new institutional approaches


Feb 5  Coase & NIE cont'd


Feb 7  Liability, regulation & enforcement

* Phaneuf & Requate, Ch. 10.


Feb. 12  Monitoring and enforcement, cont'd


Feb 14  Environmental federalism and spatial heterogeneity


Feb 19 Environmental federalism and political economy


Natural Resources Dynamics

Feb 21 Nonrenewable resources

* Hanley, Shogren, & White, Chs. 7-8.

- Harold Hotelling, 1931, "The Economics of Exhaustible Resources," *JPE* 39: 137-75

Feb 26 Nonrenewable Resources, cont'd


Feb 28 Renewable resources: Fisheries

* Hanley, Shogren, & White, Ch. 9.


March 5 Renewable resources: Forestry

* Hanley, Shogren, & White, Ch. 10.
Welfare Economics

March 7  Measures of individual welfare -- consumer surplus

* Phaneuf & Requate, Ch. 14 and review Micro I notes

March 12  Welfare aggregation

* Review Micro II notes

  * Slesnick 1998 (op cit.), §3


March 14  Discounting

* Phaneuf & Requate, §21.1


[Spring Break]
March 26  Uncertainty

* Freeman, Herriges, Kling, Ch. 5 (up to p. 151).


Nonmarket Valuation

March 28  Nonmarket valuation: Introduction

* Phaneuf & Requate, Ch. 15


April 2  Travel cost model and demand for outdoor recreation

* Phaneuf & Requate, Chs. 16-17


April 4  Locational choice, property values, and hedonics: Introduction and hedonic first stage

* Phaneuf & Requate, Ch. 18


○ Kelly C. Bishop and Alvin D. Murphy, 2018, "Valuing Time-Varying Attributes using the Hedonic Model: When is a Dynamic Approach Necessary?" RESTAT, forthcoming.
April 9  Hedonics: The second stage


April 11  Sorting models


April 16  Averting behavior and health valuation

* Phaneuf & Requate, Ch. 20

April 18  Averting behavior and health valuation, cont'd


April 23  Stated preference

* Phaneuf & Requate, Ch. 19


April 25 Climate Adaptation


Additional Notes

- The course syllabus provides a general plan for the course; deviations may be necessary.

- Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take time to fill out the online course evaluation.

- Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought.