

## **Economics 266 - Economics of Natural Resources (Fall 2011)**

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*Office Hours:* Tuesdays 11:00am - 12:00noon (*except 10/25 and 11/15*) and by appointment any time.

*Class:* Tuesday and Thursday 12:30–1:50pm Econ 304

This course is an introduction to the principal topics and methods in natural resource and environmental economics. Within this broad outline we'll give particular attention to environmental regulation of industry and the economics of climate change. You may choose to focus on any aspect of resource or environmental economics in your written assignments, but are encouraged to talk with me particularly if working on topics discussed only in passing during class.

### **Reading List**

Required readings will be assigned each week and a careful reading of them will help everyone gain much more from the discussion in class. I'm happy to direct you to additional papers on particular topics that interest you – feel free to come by my office hours or send an email.

### **Assignments, Grades, Etc.**

*i) Numerical policy simulation (due beginning of class 10/27 – but you'll need to start early)*

Develop a simulation of a simple environmental policy in a setting with pre-existing distortionary taxes. The first part of the assignment will be mainly on paper (working with a typical set of functions used to represent utility and production) and the second part using Matlab or similar.

*ii) Mock referee report (due 11/10 by email)*

A concise two page referee report of a recent working paper or journal article in environmental economics (papers will be assigned in class). It should include a brief summary of the methods and findings followed by a longer section (i.e. more than a page) critiquing the paper. Your critique can include potential problems with the method or assumptions that may be violated, suggestions for improvements in the presentation, and plausible extensions and refinements to the main arguments.

*iii) Research proposal and presentation (presentations 11/29 and 12/1; paper due 12/5)*

A proposal for a project that would contribute to the environmental economics literature. The written proposal and literature review (5-8 pages of concise text, excluding references, tables, etc.) is accompanied by a presentation during the last week of classes.

Grades will be based mainly on the items above. Contribution to the class discussion is also expected and will influence your grade (by at most one step).

## Outline

9/22	Introduction
9/27	Externalities and Pigouvian taxes
9/29	Tradable permits
10/4	Prices vs. quantities (uncertainty)
10/6	Second best optimal policies
10/11	Second best optimal policies
10/13	Numerical simulation, climate change
10/18	Climate change
10/20	Climate change, induced technological change
10/25	<b><i>No class</i></b>
10/27	Transportation <i>(Problem set due)</i>
11/1	Transportation
11/3	Transportation, non-market valuation
11/8	Ecosystem valuation
11/10	Development and environment <i>(Mock referee report due)</i>
11/15	Resource models/fisheries
11/17	Fisheries
11/22	Sustainability
11/24	<i>Thanksgiving holiday</i>
11/29	Presentations
12/1	Presentations

*Final paper due 12/5*