Course schedule: Monday 2:30 - 5:30  
Course location: FSS 9003  
Office: FSS 9038  
Office hours: Monday 12:30 - 2:30 (or talk to me during class break)  
E-mail: aheyes@uottawa.ca

Course Description

Awareness of environmental problems - and the need for society to develop mechanisms to better protect the natural environment - has increased markedly in the past 20 years. The field of environmental economics has also blossomed in that time, from being at the fringe of the discipline to being one of the major mainstream fields. Environmental economists work in the private, government and third sectors, international agencies, etc. It is also very attractive as a research area. The key environmental issues are rapidly-evolving - as is our understanding of them - and most research topics are deeply trans-disciplinary.

This is a topics-based, graduate level course in environmental economics. Topics-based means that we **don’t** try to provide a systematic survey of the field - rather we explore particular parts of the literature in greater detail. Some of these might be “classic” topics, others will reflect current state of the art. The aim is to understand general principles, see some applications, and get a feel for how economists working at the research boundary go about modeling environmental problems and policies.

The course will cover 10 topics, chosen to be important and interesting. For each topic a ‘cluster’ of readings is assigned. These are mostly journal articles or working papers. Class time will be spent working through the articles, discussing their strengths and weaknesses, and connections between them. There will be a mixture of instructor and student presentation.

There is no text-book for the course and you don’t need to buy one. However, If you want one to support your wider interest and learning in environmental economics, then my recommendation would be: Perman, R. Y.
Ma, J. McGilvray ad M. Common Natural Resource and Environmental Economics (3rd Edition) Pearson-Addison-Wesley, which is a good book. Our focus will be on the articles on this reading list.

Course Requisite
Permission of instructor - upper-level micro and econometrics strongly recommended.

Course Requirements

1. **Readings:** You are expected to study ALL the assigned readings. Most of the readings are journal articles and in some cases challenging. You are not expected to ‘learn’ mathematical models, but understand key features of models, implications and the connections between them.

2. **Exams:** A 2 hour mid-term on October 30 and be worth 25%. It will be based on topics 1 to 5. A 2 hour final exam on December 6 (also 25%) will cover topics 6 to 10.

3. **Presentation (25%)**: Each week students will present one or two of the readings (typically those marked with asterisks, but there may be some adjustment) and expose its significance. Presentations will be assigned by lottery each week (e.g. on November 13 we will draw names of presenters for November 20). Everyone will present once or during (depends on numbers). You will get written feedback on your presentation.

4. **Term Paper (25%)**: To be submitted to me by email (PDF) by midnight on Friday November 25, and a hardcopy handed to me in class on November 28. No late submissions without a medical note covering each day of delay.

Presentation

Oral presentation is a vital skill in most professional settings and is an important element of this course. A presentation should last 25 minutes, including questions/discussion. You will be expected to regulate time yourself. Slides should be a simple PDF on a memory stick. The presentation should identify succinctly: (a) the research question in the paper (b) the key novelty in the modeling/empirical strategy and (c) main insights. Do not get bogged down in presenting lots of maths, or lengthy literature review: identify and present the key bits. Doing this requires careful reading and contemplation of the paper. You are encouraged to be critical. In addition, you should finish you talk by presenting an idea of a research project inspired by the paper (in other words, suggest another paper that could be written). You will be marked on (a) clarity of presentation, (b) ability to distil the key elements (c) quality of research idea.
Term Paper

Choose 3 NBER technical papers published since January 2014 in the Environment and Energy series (available at [http://www.nber.org/papersbyprog/EEE_archive.html](http://www.nber.org/papersbyprog/EEE_archive.html)). The papers should be related to each other by theme (e.g. “Social Impacts of Extreme Weather Events”, or “Behavioral Interventions to Encourage Energy Conservation”). You task is to: **Summarize the methods and contributions of the three papers, how they fit together and complement each other. Be critical in your summaries and identify limitations of the analysis.** Choosing papers that use different methods (e.g. IV, RDD, etc.) will allow you to show off your knowledge. Do not choose a paper we have read in class. Use between 1500 and 2000 words and **DO NOT PLAGIARIZE.**

Assessment Summary

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<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>25%</td>
<td>Midterm (October 30)</td>
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<td>25%</td>
<td>Final Exam (December 6)</td>
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<td>25%</td>
<td>Term Paper (due November 25)</td>
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<td>25%</td>
<td>Presentation</td>
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Schedule

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Content</th>
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<tbody>
<tr>
<td>September 11</td>
<td>Topic 1</td>
<td>Pollution Control Instruments</td>
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<tr>
<td>September 18</td>
<td>Topic 2</td>
<td>Enforcement</td>
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<td>September 25</td>
<td>Topic 3</td>
<td>Green Behavior</td>
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<td>October 2</td>
<td>Topic 4</td>
<td>The Green Corporation</td>
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<td>October 16</td>
<td>Topic 5</td>
<td>Green Activism</td>
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<td>October 23</td>
<td>No class</td>
<td>Reading Week</td>
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<td>October 30</td>
<td>Midterm (2 hours)</td>
<td>On Topics 1 – 5</td>
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<td>November 6</td>
<td>Topic 6</td>
<td>Heat</td>
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<td>November 13 (e)</td>
<td>Topic 7</td>
<td>Pollution, Education and Productivity</td>
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<td>November 20 (e)</td>
<td>Topic 8</td>
<td>Pollution and Health</td>
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<td>November 28</td>
<td>Topic 9</td>
<td>International Environmental Agreements</td>
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<td>December 4</td>
<td>Topic 10</td>
<td>Fundamentals of Cost Benefit Analysis</td>
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<td>December 6 (Weds)</td>
<td>Final Exam (2 hours)</td>
<td>On Topics 6 – 10</td>
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Readings (asterisk denotes item for student presentation)

**Topic 1 - Pollution Control Instruments (Theory)**

**Topic 2 – Enforcement and compliance (Theory and Empirics)**

**Topic 3 – Green Behavior (Theory and Empirics)**

**Topic 4 - The Green Corporation (Theory and Empirics)**

**Topic 5 - Green Activism (Theory and Empirics)**

1. Heyes et al (2013) “Contest Models and Environmental Policy” in Encyclopedia of Energy, Natural Resources and Environmental Economics (I will distribute this a week before class)

**Topic 6 - Heat (Empirics)**


**Topic 7 – Pollution, Education and Productivity (Empirics)**


**Topic 8 - Pollution and Health (Empirics)**


**Topic 9 - International Environmental Agreements (Theory and Empirics)**


**Topic 10 – Some Fundamentals of Cost-Benefit Analysis**
