Course description: In this advanced undergraduate course we will apply the tools of economic analysis to environmental issues and problems. We will study how to reconcile economic objectives and environmental goals, and how markets can be harnessed to improve environmental quality. Emphasis will be placed on regulation and policy implications within both microeconomic and macroeconomic frameworks. Microeconomic topics include the study of externalities and welfare analysis, public goods and property rights, and environmental valuation techniques. Macroeconomic issues involve the analysis of economic growth, environmental accounting, and environmental innovation.

Prerequisites: ECON 251: Intermediate Microeconomic Theory

Textbooks:


Both books are available at the St. Lawrence University bookstore. The book by Harris and Roach is a standard textbook that we will follow closely. The book by Stavins is a compilation of readings from various sources. These readings will expose you to influential studies in environmental economics and will help you learn about environmental economics as it applies to current events. Some of these articles may be technical. If this occurs, you should focus on the main ideas and findings of the paper and skim over the technical sections. In addition to these readings, there are additional articles that will supplement the class lectures. These will be posted on Sakai and are listed in the course outline at the end of this syllabus. You are welcome to use older editions of either text.
Grades: Your overall score in the class will be based on a weighted average of points received from exams, a group paper, homework, and participation. There will be no extra credit.

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<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>Tuesday, October 11th (normal class time)</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>Monday, December 12th (1:30pm – 4:30pm)</td>
<td>25%</td>
</tr>
<tr>
<td>Group paper</td>
<td>Due Thursday, November 17th (start of class)</td>
<td>20%</td>
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<tr>
<td>Homework</td>
<td></td>
<td>15%</td>
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<tr>
<td>Participation</td>
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Exams: There will be one midterm exam and one final exam. Exams may consist of multiple choice, numerical problems, graphs, and essay questions. If you miss an exam, you will receive a zero. No makeup exams will be given. There is one exception to this rule. In the event that you miss an exam, the weight of the final exam may be increased to cover the missed exam only if you can provide proof (documentation) of a serious emergency/illness or you have a prearranged excused absence from me. You must take the final exam at the time determined by the official university exam schedule. Plan accordingly.

Homework: In order to help you practice the skills and apply the material learned in class, there will be several problem sets assigned during the course. Assignment questions may include numerical problems, graphical analysis, written analysis, or a short paper. These problem sets and their due dates will be announced in class. Students may work together to discuss problem sets, but must write up individual solutions. If you choose to work with others, please report this on your assignment. The lowest homework score will be dropped when calculating your overall grade. Late homework will not be accepted for any reason.

Group paper: Students will be divided into groups and asked to prepare a 3-5 page written memorandum. The goal of this short paper is to apply class concepts to a real world policy scenario. You will be given a specific policy problem that is complex, authentic, and requires each group to collaborate to develop an argument supported by scholarly evidence. Papers will be evaluated on organization, effective use of evidence, and writing mechanics. You are encouraged to use The WORD Studio located in ODY Library to get feedback from peers on your paper. They can also help with developing ideas, strengthening organization and transitions, and using and citing sources. For more information visit http://www.stlawu.edu/word-studio. Late papers will not be accepted for any reason.

Participation: In some class periods, we will discuss articles from the Stavins book and other sources. It is important that you carefully read the assigned articles before class, and come to class prepared to contribute constructively to the discussion. On the day in which we discuss a given article, you will turn in a one-page, double-spaced summary of the article. In your summary, you should i.) identify the main research question or purpose of the paper, ii.) indicate the method or strategy the author uses to form their argument, and iii.) discuss the main findings or conclusion of the paper using your own words. These summaries will be graded and will be the basis of your participation grade. Articles that will be discussed in class are noted in bold text on the course outline (pages 4-5). Late article summaries will not be accepted for any reason.
Grading scale:

<table>
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<tr>
<th>Percent score</th>
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<tbody>
<tr>
<td>95% to 100%</td>
<td>4.00</td>
<td>73% to 75%</td>
<td>2.25</td>
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<tr>
<td>91% to 94%</td>
<td>3.75</td>
<td>70% to 72%</td>
<td>2.00</td>
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<tr>
<td>88% to 90%</td>
<td>3.50</td>
<td>67% to 69%</td>
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<td>85% to 87%</td>
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<td>64% to 66%</td>
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<tr>
<td>82% to 84%</td>
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<td>61% to 63%</td>
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<tr>
<td>79% to 81%</td>
<td>2.75</td>
<td>51% to 60%</td>
<td>1.00</td>
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<tr>
<td>76% to 78%</td>
<td>2.50</td>
<td>≤ 50%</td>
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**Attendance:** Attendance is required. If you cannot attend class due to illness, it is your responsibility to get a copy of the class notes from a classmate. Some test questions may cover material not in the textbook. Student athletes should contact me in advance of any absences.

**Academic honesty:** Students are responsible for the honest completion and representation of their work. Academic misconduct, including cheating and plagiarism, will not be tolerated. Details about the student Academic Honor Code can be found at [http://www.stlawu.edu/sites/default/files/resource/AcademicHonorPolicy.pdf](http://www.stlawu.edu/sites/default/files/resource/AcademicHonorPolicy.pdf).

**Disability accommodations:** If you have a disability and need accommodations please contact the Disability and Accessibility Services Office and notify me as soon as possible. Specific information can be found on the DASO website at [http://www.stlawu.edu/disability-and-accessibility-services](http://www.stlawu.edu/disability-and-accessibility-services).

**Important dates:**
- First day of class: Thursday, August 25th
- **Midterm exam:** Tuesday, October 11th (normal class time)
- Mid-semester break: Thursday, October 13th through Sunday, October 16th
- **Group paper due:** Thursday, November 17th (start of class)
- Thanksgiving break: Monday, November 21st through Sunday, November 27th
- Last day of class: Thursday, December 8th
- **Final exam:** Monday, December 12th (1:30pm – 4:30pm)
- Homework and article summary due dates will be announced in class.
Tenative course outline:
Readings listed in bold require a one-page summary

I. Introduction to environmental economics
   Harris and Roach (2013): Chapter 1


   A. Microeconomics review
      Harris and Roach (2013): Appendix 3.1

II. Environmental microeconomics

   A. Externalities
      Harris and Roach (2013): Chapter 3, Appendix 3.2
   B. Public goods and common property resources
      Harris and Roach (2013): Chapter 4
   C. Environmental valuation
      Harris and Roach (2013): Chapter 6
   D. Pollution: Analysis and policy
      Harris and Roach (2013): Chapter 16


III. Environmental macroeconomics


   A. National income and environmental accounting
      Harris and Roach (2013): Chapter 8
   B. Growth, population, and the environment
      Harris and Roach (2013): Chapters 2 & 9


C. Greening the economy
   Harris and Roach (2013): Chapter 17

1. International competitiveness


2. Environmental innovation


D. Environmental IS-LM model

IV. Additional topics (time permitting)

A. Trade and the environment
   Harris and Roach (2013): Chapter 20


B. Climate change
   Harris and Roach (2013): Chapters 18 & 19