Instructors
The course will be team-taught by the following professors:

Christine Crago 217C Stockbridge Hall ccrago@resecon.umass.edu
Tom Stevens 224 Stockbridge Hall tstevens@resecon.umass.edu
John Stranlund 222 Stockbridge Hall stranlund@resecon.umass.edu

Course description
This is an upper level course that will cover a selected number of advanced topics in environmental and natural resource economics. It is not a survey course, but rather one that will cover certain issues in some depth. The topics were chosen based on their importance in the field of environmental natural resource economics, and often on individual professor’s research programs. A list of topics is attached.

Prerequisites

Requirements:
Three in-class exams at the end of each section. Each exam will count for 1/3 of your grade. The exams will be held on October 1, November 3, and during finals week. The last exam is not cumulative. No makeup will be given on any exam except in extraordinary circumstances.

Reading Material
There is not a required text for this course. Required readings will be posted on Moodle.
Course Outline and Readings

Beyond the timing of each module, specific topics and required readings may change as the semester progresses.

Module 1: Professor Stranlund

Review of the economics of emissions taxes and transferable emissions permits

Emissions taxes versus transferable emissions permits under uncertainty


Environmental Enforcement

Common pool resources


Environmental Policy in the Developing World

Module 2: Professor Crago

Optimal environmental taxes in general equilibrium

Fuel market externalities and regulation

Biofuels – Social and Environmental Impacts


**Renewable energy**


**Energy efficiency**


**Investment in renewable energy and energy efficiency**


**Module 3: Professor Stevens**

**Introduction to Optimal Control Theory (Nonrenewable resources)**


**Renewable Resource Allocation Over Time**


**Dynamics of Environmental Quality Control**

ACADEMIC HONESTY

All members of the University community must participate in the development of a climate conducive to academic honesty. While the faculty, because of their unique role in the educational process, have the responsibility for defining, encouraging, fostering, and upholding the ethic of academic honesty, students have the responsibility of conforming in all respects to that ethic. Intellectual honesty requires that students demonstrate their own learning during examinations and other academic exercises, and that other sources of information or knowledge be appropriately credited. Scholarship depends upon the reliability of information and reference in the work of others. No form of cheating, plagiarism, fabrication, or facilitating of dishonesty will be condoned in the University community.

Academic dishonesty includes but is not limited to:
- **Cheating** - intentional use, and/or attempted use of trickery, artifice, deception, breach of confidence, fraud and/or misrepresentation of one’s academic work.
- **Fabrication** - intentional and unauthorized falsification and/or invention of any information or citation in any academic exercise.
- **Plagiarism** - knowingly representing the words or ideas of another as one’s own work in any academic exercise. This includes submitting without citation, in whole or in part, prewritten term papers of another or the research of another, including but not limited to commercial vendors who sell or distribute such materials.
- **Facilitating dishonesty** - knowingly helping or attempting to help another commit an act of academic dishonesty, including substituting for another in an examination, or allowing others to represent as their own one’s papers, reports, or academic works.

Sanctions may be imposed on any student who has committed an act of academic dishonesty. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible.

Formal definitions of academic dishonesty, examples of various forms of dishonesty, and the procedures which faculty must follow to penalize dishonesty are contained in *The Code of Student Conduct*, a publication of the Dean of Student Affairs. A student accused by an instructor or another student of having committed a breach of the academic honesty regulations has the right to appeal before any penalty can be imposed. Appeals must be filed within ten days of notification by the instructor that s/he suspects dishonesty. Information on the appeals process is also contained in *The Code of Student Conduct*, or can be obtained from the Ombuds Office, where appeals are filed.