Economics 127
Climate Change: Economics and Policy

This seminar class will introduce economic and policy issues underlying the threat of global climate change, in particular the role of economics in designing efficient climate policies. It will also present some of the scientific methods used in assessing the climate change processes. Economic topics will include externalities, taxation, valuation, discounting, and cost-benefit analysis. The economic principles will then be applied to selected applications like the impacts of climate change on agriculture, energy use, health, etc. As a pre-requisite, students should have a very good understanding of microeconomic theory, statistics, and multivariate regression analysis.

While the course will be primarily organized around lectures (as opposed to open discussion), participation in class is essential and I expect students will ask and answer questions during the lectures. In the last 5 or so lectures, students will do a class presentation of a research paper (papers to be selected from a list). All presentations must be done in teams of 2 without exception.

Course Time: Tuesday and Thursday, 11:00 – 12:15, Building 387, Room 104


Office Hours: Friday 1:30 – 3:00, 2050 North Hall


Other readings will be available online through the class homepage.

Grading:
Final grades will be calculated as follows:
30% Midterm exam on Thursday February 5
20% Paper presentation and written summary, plus in class participation, see explanations below
50% Final exam (covering all course material, held during the examination period)

I will post some of the midterm questions in advance on the class website. Students are encouraged to prepare for these questions in advance of the midterms (no answer key provided). I can provide some assistance during office hours and will not answer emails about the practice questions. The examinations will be composed of analytical exercises, questions about the readings, and true/false/explain type of questions.

• There will be no make-up exam (either for the midterm or final). Students who miss any exam will receive a grade of ZERO for that exam.

• Students must make an effort to write legibly on their exam answer sheet. If I cannot read your answer, you will receive no credit for it.

Class conduct:
• I expect students to attend every lecture, read the assigned papers before class, and ask and answer questions.

• Students who chat, use their cell phones for any purpose, and/or create any unwarranted disruption of the class will be asked to leave.

• Following the university’s policy on academic conduct, all academic dishonesty, such as plagiarism, and other forms of cheating will be met with disciplinary actions.
Economics 127: Required Readings and Tentative Class Schedule.

Jan 6 – Jan 13  Block 1: Background and Overview of Science of Climate Change

The Economist (2013): “It's still our fault,” September 27
The Economist (2014): “Our guide to the actions that have done the most to slow global warming,” September 20
The Economist (2014): “In an agreement on greenhouse-gas emissions, America has made bigger concessions than China,” November 12

Jan 15 – Jan 20  Block 2: Economics of Environmental Quality

Readings: Field & Field, Environmental Economics, Chapters 3-4 (Review of economic valuation and efficiency of market outcomes--- this will only be briefly covered in class)
Field & Field, Environmental Economics, Chapter 5

Jan 22 – Jan 27  Block 3: Demand for Environmental Goods

Readings: Field & Field, Environmental Economics, Chapters 7-8

Jan 29 – Feb 17  Block 4: Economic Analysis of Environmental Policies

Readings: Field & Field, Environmental Economics, Chapters 9-13, 15
The Economist (2011): “Do economists all favour a carbon tax?” September 19
The Economist (2014): “Current policies are a mess. Here’s how to fix them,” January 25
The Economist (2014): “A carbon price would be better, but Barack Obama’s plan
to cut emissions from power plants is welcome,” June 7


Feb 19 – Feb 24        Block 5: Climate Change: Impacts, Mitigation and Adaptation


The Economist (2013): “Are models that show the economic effects of climate change useless?” October 5

The Economist (2014):” Economists are getting to grips with the impact of climate change,” January 18

Feb 26 – Mar 12       Student Class Presentations