

EC313 Environmental Economics
Course Outline

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Winter 2014

Course objectives and requirements:

This course investigates the economics of global warming.

The problem of global warming can be usefully described with the following simple economic model. We face a trade-off between current consumption, future consumption, and future climate, have preferences over consumption and future climate and would like to choose our optimal climate/consumption bundle.

This course is organized around filling in the details required to make this model useful, characterizing the optimal climate/consumption path suggested by the model, and finally, investigating policies to achieve the optimal path.

The first half of the course will be devoted to developing an understanding of the facts that confront us. This part of the course will require a familiarity with basic statistics and will require you to learn to write simple programs in Stata. The second part of the course will be devoted to solving for the optimal climate and consumption path. The third part of the course will investigate carbon mitigation policies. The second and third parts of the course will require familiarity with microeconomics and basic calculus. In particular, you will be expected to be familiar with the material from intermediate microeconomics and be able to solve univariate and simple multivariate optimization problems.

Prerequisites:

To enroll in this course you must have completed one course in each of the following two lists:

- ECO200Y1/ECO204Y1/ECO206Y1,
- ECO220Y1/ECO227Y1/
(STA247H1,STA248H1)/(STA250H1,STA255H1)/
(STA257H1,STA261H1)

The University and the Economics Department enforce prerequisite requirements strictly. Students enrolled in courses for which they do not have the published prerequisites may have their registration in those courses canceled at any time without warning. If you are unsure whether you satisfy the prerequisites, please check with our undergraduate secretary, Ms. Robbie Innes. The University does not allow me to waive prerequisites.

Course website:

The course website is at:

http://homes.chass.utoronto.ca/~mturner/ec313/eco313_main.htm

The schedule on this site provides a detailed tentative schedule of the material to be covered during the term. You should check this schedule at least weekly for updates and changes.

This website is also where you will find; supplementary readings, homework assignments and solutions, lecture notes, old exams, and announcements.

Lectures:

There is a single section of this course. Lectures are on Thursdays from 2-4 PM in SS2127. There is also single tutorial on Stata. The time and location for the Stat tutorial and deviations from the usual Thursday afternoon lecture schedule are noted in the online course schedule.

Required Texts:

- Storms of my grandchildren, J. Hansen, Bloomsbury, 2009.
- A Question of Balance, W. Nordhaus, Yale University Press, 2008.

Both books should be available at the bookstore.

I will often refer to: The Economics of Climate Change: The Stern Review, N. Stern, Cambridge University Press 2008. An online version is available at this link:

http://homes.chass.utoronto.ca/~mturner/ec313/readings/Sternreview_full.pdf

You are also required to have access to the Stata software package. You can get the student version inexpensively from the software licensing office in Robarts library:

<http://www.utoronto.ca/ic/software>

The six month subscription to small Stata is fine.

Office hours:

I will have office hours regularly during the term. For a schedule and location, please check this link:

http://homes.chass.utoronto.ca/~mturner/office_hours.htm

I will also, usually, be available to talk after class.

I will try to maintain a regular schedule of office hours, but will occasionally need to deviate from this schedule. In this case, I will make a note at the link above. I encourage you to check before you come to my office.

There are two TA's for the course. Their office hour schedules are also available at the link above.

Grading:

A final which will count 50%. It will be two hours long and will take place at a time to be arranged during the December exam period. Previous exams are available on the course website. The midterm will occur in class, will last one hour, and will count for 35% of your final grade.

There will also be approximately weekly problem sets. I will collect problem sets at the beginning of three randomly selected lectures. The best two of these three will count for 15% of your grade. Problem sets will not be accepted after the lecture during which they are collected. If you need to miss class, you can hand in problem sets early to the economics receptionist. We will provide more detail about how we marked collected problem sets at this link:

http://homes.chass.utoronto.ca/~mturner/ec313/hw_note.htm

If you are unhappy with your grade on a problem set, please look at the solution set before you come to talk to me about it. If you want a problem set remarked, we will generally remark the whole thing, with the possibility that your mark could go up or down.

This schedule deliberately allows you to miss a problem set without penalty, so you get to be sick once for free. If you miss a second problem set I may allow you to hand a problem set in late. I will consider this on a case by case basis. Expect that I will require a doctor's note indicating that you were too sick to do the work or come to class.

Academic misconduct:

Copying or plagiarizing or other forms of academic misconduct will not be tolerated. Students caught engaging in these activities will be subject to academic discipline ranging from a mark of zero on an assignment to dismissal from the university, as outlined in the academic handbook.

Email Policy:

I will try to reply to email within 24 hours, except on weekends. For me to be able to do this, I need some rules about email correspondence:

- Try to formulate questions that require short answers. If it takes more than a few sentences to answer, then the question is too hard for email. Please come to office hours instead.
- I won't answer emails that request information that can be found on this website. Check here first.
- No emails about grading. Please come to office hours for this.

I encourage you to provide course feedback by email.