57A – ENVIRONMENTAL ECONOMICS
SPRING 2012 (Tentative)

Course Overview: This course is designed to provide an introduction to environmental economics. In particular, we will consider the impact of the economy on the environment. The first half of the course will be devoted to learning about the problems of market failure and the theory behind government responses to these problems. In the second half of the course we will look at the effect of these regulations in financial markets, workplace health and safety, development, and trade. Other topics we will cover will include cost-benefit analysis, the measurement of the benefits of non-market goods, and the costs of regulation.

Course Goals: Students should be able to (1) identify the economic principles underlying the market failure associated with a given environmental problem; (2) understand fundamental economic solutions to solve for the market failure; and (3) think critically about the strengths and weaknesses of environmental policies.

Course Meeting Times: MW 8:30 -9:50 am.
Office Hours: MW 10 a.m. - 11a.m., or by appointment

Course Requirements: Mandatory attendance at lectures, the completion of course assignments, exams, and class presentations. Grading in the course will be as follows:

1. Assignments (20% of grade) – I will assign 5 assignments over the course of the semester. You are required to turn in all of these exercises. You must do these exercises on your own. Assignments will be due in class (due dates are given in the syllabus). NO late assignments will be accepted.

2. Exam (70%) - There will be 2 exams given during the semester.

3. Group assignment and class presentations (10%).

Please note that there will be NO make-up exams given. Absence from an exam will be excused only for a serious illness or family emergency (which must be documented). There are NO EXCEPTIONS.

Special Accommodations: If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately. Please keep in mind that reasonable accommodations are not provided retroactively.

Academic Honesty: You are expected to be honest in all of your academic work. Instances of alleged dishonesty will be forwarded to the Office of Campus Life for possible referral to the Student Judicial System. Potential sanctions include failure in the course and suspension from the University. If you have any questions about my expectations, please ask. Academic dishonesty will not be tolerated and will be vigorously prosecuted.

Cell Phone and Laptop Policy: The use of cell phones in class is strictly PROHIBITED. Please turn your cell phone off or put it on vibrate during lecture. Laptops may not be used in class without the professor’s permission.
POLICY ON HOMEWORK SETS AND EXAMS

1. Homework sets are designed to help you learn how to apply the material presented in lectures. You are permitted and indeed encouraged to discuss course material, including homework, with other students in the class. However, you are expected to turn in your own individual solutions for each homework set. Discussion with others is intended to clarify ideas, concepts, and technical questions, not to derive group homework set solutions. Identical homework set answers (especially when the steps used to derive answers are not shown or when questions of interpretation are involved) violate this policy and may receive no credit or occasion disciplinary action.

2. Handwritten solutions are fine, so long as they are legible and neat. Please remember: if we can’t read it, we can’t grade it.

3. In fairness to students who complete assignments on time, late homework sets will not be accepted. You must turn in assignments during the lecture on the day they are due or earlier in the day to my mailbox. Please note that assignments left under my office door will be discarded.

4. During exams, you may consult the proctor administering the exam if you need clarification of exam questions. No discussion or other form of communication with anyone else will be permitted after the exams have been handed out, until all students have turned in their exam books. Students found to have cheated or engaged in any other unethical behavior will be given a grade of F on the examination involved, and will be turned over to the appropriate disciplinary committees within Brandeis University for further action.

If you have any questions regarding these policies, please raise them with me.
IMPORTANT DATES TO REMEMBER:

Feb 20-24  Winter Break. No classes.
Feb 15     Midterm #1, in class.
April 6-13  Passover Break. No classes.
April 2     Midterm #2, in class.

ASSIGNMENT DUE DATES:

Jan 30      Assignment #1 due, in class.
Feb 8       Assignment #2 due, in class.
Feb 29      Assignment #3 due, in class.
Mar 14      Assignment #4 due, in class.
April 2     Assignment #5 due, in class.
April 23 - 30 Student presentations, in class.
OUTLINE:

PART I: MODELING ENVIRONMENTAL PROBLEMS

Jan 18 Weds  Environmental objectives. Review of the market process
Readings: C&T Chapter 1, 2

Jan 23 Mon  Review of the market process, cont’d. Market failure.
Readings: C&T Chapter 3.

Jan 25 Weds  More on market failure.

PART II: SOLUTIONS TO ENVIRONMENTAL PROBLEMS

Jan 30 Mon  Conventional solutions: command and control
Readings: C&T Chapter 4.
Assignment #1 due, in class.

Feb 1 Weds  Market based solutions
Readings: C&T Chapter 5.

PART III: ENVIRONMENTAL PLANNING

Feb 6 Mon  Risk analysis
Readings: C&T Chapter 6.

Feb 8 Weds  Measuring costs
Readings: C&T Chapter 7.
Assignment #2 due, in class.

Feb 13 Mon  Estimating Environmental Costs
Readings: C&T Chapter 8.

Feb 15 Weds  Midterm #1, in class.

Feb 20-24  No Classes. Winter Break.

Feb 27 Mon  Cost Benefit Analysis
Readings: C&T Chapter 9

**PART IV: AIR POLLUTION POLICY**

Feb 29 Weds *Air Quality*

Readings: C&T Chapter 10
Assignment #3 due, in class.

Mar 5 Mon *Mobile Source Pollution*

Readings: C&T Chapter 11

Mar 7 Weds *Stationary Source Pollution*

Readings: C&T Chapter 12

Mar 12 Mon *Global Air Pollution*

Readings: C&T Chapter 13

**PART V: WATER POLLUTION POLICY**

Mar 14 Weds *Water Quality*

Readings: C&T Chapter 14
Assignment #4 due, in class.

Mar 19 Mon *Improving Water Quality*

Readings: C&T Chapter 15

**PART VI: SOLID WASTE AND TOXIC SUBSTANCE POLICY**

Mar 21 Weds *Managing Hazardous Solid Waste and Waste Sites*

Readings: C&T Chapter 17.

Mar 26 Mon *Managing Household Waste*

Readings: C&T Chapter 18.

Mar 28 Weds *Midterm #2, in class*

April 2 Mon *Toxic Chemicals*

Readings: C&T Chapter 19
Assignment #5 due, in class.

**PART VII:  GLOBAL ENVIRONMENTAL ISSUES**

April  4  Weds  *International Agreements*

Readings: C&T Chapter 20

April  6 - April 13  *Passover Break. No classes.*

April  16  Mon  *Sustainable Approaches*

Readings: C&T Chapter 21

**PART VIII:  MISCELLANEOUS TOPICS/STUDENT PRESENTATIONS**

April  18  Weds  *Can “green” power save us from global warming?*

April  23  Mon  Student presentations

April  25  Weds  Student presentations

April  30  Mon  Student presentations