Prerequisite: Graduate status or permission of instructor

Background: This class is the first of a two course sequence in advanced microeconomic theory.

Grade Policy: Grades will be determined based on performance on exams and problem sets:

- Problem Sets: 15%
- In Class Exams: 50%
- Final Exam: 35%

The in-class exams will be given on **Wednesday, Oct. 8** and **Wednesday, Nov. 12**. The final exam will be given during the final exam block, **Friday, Dec. 12, 2013** from 12 noon to 2 pm. Mark these dates on your calendar now. If I feel that there is a valid reason for missing an exam, I will compute your course grade on the basis of your other work in the course. I will not give a make-up exam. I will also hand out (near) weekly short problem sets each Wednesday to be turned in at the beginning of the next class. In all cases they are due in class at the beginning of the class period.

Learning Outcome Objectives: Students in this class should expect to

- Learn fundamental microeconomic concepts such as scarcity, incentives, trade-offs, opportunity cost, efficient allocation of resources, and market failures, among others;
- Apply economic theory to a range of economic issues; and
- Apply multivariate calculus and linear algebra to the study of economic issues and use mathematical tools to derive results in economic theory.

Web Access to Course Materials: I use the Tufts Trunk website to distribute information, handouts, problem sets, answers, etc. You should check this website frequently. I will post announcements, hints, and other useful information throughout the semester. If you ever need a document for the class that you've lost or not received, you'll be able to download it from this site.

Readings: The textbooks for this course are *Microeconomic Analysis* by Hal R. Varian (W.W. Norton, 1997, third edition) and *Mathematics for Economists* by Carl Simon and Lawrence Blume (W.W. Norton, 1994). I will assume that you have access to these books. I will also distribute lecture notes. Some other texts that cover this material at similar levels include:
Jehle, G. and P. Reny, *Advanced Microeconomic Theory*
Baumol, W., *Economic Theory and Operations Analysis*
Mas-Colell, A., M. Whinston, and J. Green, *Microeconomic Theory*
Deaton, A. and J. Muellbauer, *Economics and Consumer Behavior*
Silberberg, E., *The Structure of Economics: A Mathematical Analysis*

If you need some refreshing in undergraduate microeconomics or mathematics, you may consult any of a number of textbooks including:

Varian, H. *Intermediate Microeconomics*
Nicholson, W. *Microeconomic Theory: Basic Principles and Extensions*
Klein, M., *Mathematical Methods for Economics*

These books will be on reserve in Tisch Library.

**Schedule and Readings:** We will follow a somewhat flexible schedule. I have grouped the material into five logical sections. The notation "V:x" means chapter x in Varian. I will also provide various handouts throughout the semester pertaining to the material. While I have not provided specific references to Simon and Blume on the reading list, I will refer to it throughout the course and encourage students to use it as a reference manual for any math tools about which they feel a bit rusty.

I  **Technology** (Sept. 3 - 8)
   V: 1
   V: 26-27

II  **Optimization in Production** (Sept. 10 – Oct. 6)
   V: 2-6

Exam I: October 8

III  **Consumption** (Oct. 15 – Nov. 10)
   V: 7-10

Exam II: November 12

IV  **Markets and Welfare** (Nov. 17 – Nov. 24)
   V: 13, 22

V  **Monopoly** (Dec. 1 – Dec. 3)
   V: 14

VI  **Public Goods** (Dec. 8)
   V: 23

Final Exam: Dec. 12, 12:00 to 2:00 pm