Econ 100M: Intermediate Microeconomics, Math Intensive
Winter Quarter 2012

Professor Justin Marion
449 Engineering 2
marion@ucsc.edu
Office hours: Wednesdays 3-5pm

Overview: This course will provide the basic tools of microeconomic analysis. We will examine consumer behavior, firms’ pricing and output decisions, and market outcomes.

Prerequisites: Economics 1 and calculus. While this course is about economics, not mathematics, mathematics is a useful tool in communicating the intuitions of economics. The important mathematical tools that you should be familiar with are: graphing an equation on a two-dimensional graph, solving a system of two equations and two unknowns, understanding what a derivative is and being able to compute the derivative of a simple equation, and solving constrained optimization problems. This is not a comprehensive list, but these tools will prove to be the most important.

Class Meetings: Lectures will meet on Tuesdays and Thursdays from 10:00 to 11:45a.m.

Requirements and Grading:

1) The required text is Microeconomic Theory by Walter Nicholson & Christopher Snyder. We will use version number 11, but earlier versions are acceptable as well. The material that we cover should be unaffected by the new version, though the chapter numbers may differ. Additional readings may be assigned during the quarter.

2) Exams – There will be two midterm exam worth 20% of the grade and a comprehensive final exam worth 40%. The first and second midterm exams are scheduled to be held in class on Thursday February 2 and Tuesday February 28, respectively. The final exam is scheduled for 12-3PM on March 20. I will not offer make-up exams for either the midterm or final.

3) Problem Sets – There will be a problem set assigned close to weekly. These are worth a total of 15%. The problem sets will be graded on a completion basis, however the lowest problem set grade will be dropped. No late problem sets will be accepted. If you have an emergency that prevents you from turning in a problem set, I will count that as the lowest grade.

I encourage group discussion in working on the problem sets, however everyone must hand in their own problem set with explanations (when applicable) in your own words. If a problem requires calculations or math, you must show your work.

4) Class participation will be worth 5% of the grade.

Miscellaneous:

The website for the course is:
Please check it for course updates and additional readings during the quarter. I will place problem sets on the course website after they are handed out in class. Cheating during the exams will not be tolerated. If you are caught cheating during one of the exams, I will fail you and report the incident to the University. It is not worth it!

**Outline of the Course:**

1. **Introduction**
   - Math review (Ch. 2)  
     - Jan 10  
     - Jan 12  

2. **Demand**
   - Preferences and Utility (Ch. 3)  
     - Jan 17  
   - Budget constraints and Utility Maximization (Ch. 4)  
     - Jan 19, 24  
   - Income and substitution effects (Ch. 5)  
     - Jan 26, 31  
   - Demand concepts (Ch. 6)  
     - Feb 7, 9  

3. **Supply**
   - Production functions (Ch. 9)  
     - Feb 14, 16  
   - Cost minimization (Ch. 10)  
     - Feb 16, 21  
   - Profit maximization/supply (Ch. 11)  
     - Feb 21  

4. **Competitive equilibrium** (Ch. 16)  
   - Feb 23  

5. **Monopoly** (Ch. 14)  
   - Mar 1  

6. **Game Theory** (Ch. 7)  
   - Mar 8  

7. **Imperfect competition** (Ch. 15)  
   - Mar 13  

8. **Externalities and public goods** (Ch. 19)  
   - Mar 15