

# **Econ 100A: Intermediate Microeconomics**

## Summer session 2015

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Office hours: Tuesdays 2-4pm

### **Overview:**

This course will provide the basic tools of microeconomic analysis. Microeconomic theory is a remarkably useful body of ideas for understanding and analyzing the behavior of individuals and firms in a variety of contexts. The goal of the course is to get you to internalize this body of theory well enough so that you can rigorously and efficiently analyze a variety of problems in an economic framework. While this is a “tools” course, we will cover many real-world applications.

The first major task in the course is the development of the theory of supply and demand underlying the competitive model, which serves as the benchmark for evaluating other market structures. Outside of the purely competitive context, an understanding of demand is essential to firms’ optimal pricing and product positioning decisions. The concept of supply and the supply curve provides an invaluable framework for thinking about firm costs and investment decisions. After presenting the competitive model, we turn to other market structures more like those encountered by real-world firms such as monopoly and oligopoly. We then investigate the development and use of market power, as well as strategic interaction among firms. Finally, we examine market failures such as asymmetric information and externalities.

### **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. 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 9:00am to 12:30 p.m. in Physical Sciences 110. You will also have one TA session per week, and attendance to at least one session is required. TA sessions will be an important complement to the lectures, as they will help you understand material from the lectures and problem sets. The TA will also hold one office hour per week.

### **Requirements and Grading:**

- 1) The required text is *Microeconomics* by Besanko and Braeutigam. This text is widely available and will also be placed on reserve at the library. Version 5 is the current edition, but prior versions are acceptable as well. The different editions may vary in some minor respects, and if you use an older version it is your responsibility to keep up with any important deviations from the current version. Additional readings may be assigned during the quarter.
- 2) Exams –There will be one midterm worth 30% of the grade and a comprehensive final exam worth 50%. The midterm exam is scheduled for the first half of class on July 9. The final exam will be held on the final day of class, July 23. I will not offer make-up exams for either the midterm or the final.
- 3) Problem Sets – There will be 4 problem sets throughout the quarter, and these are worth a total of 20%. The problem sets will be graded. No late problem sets will be accepted. 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.

## **Miscellaneous:**

Course information and materials, including homework assignments and solutions, will be posted on eCommons. Please check it for course updates and additional readings during the quarter.

I expect you to uphold the academic integrity expected of students of the university. Please see [http://undergraduate.ucsc.edu/acd\\_integrity/](http://undergraduate.ucsc.edu/acd_integrity/) for more information. 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!

## **Course Outline:**

### **Introduction: Economic analysis**

1. Introduction
  - Analyzing economic problems (Ch. 1)
  - Demand and supply analysis (Ch. 2)

### **Part I: Consumer theory, June 23 - July 2**

2. Consumer Theory
  - Utility (Ch. 3)
  - Consumer Choice (Ch. 4)
  - Demand (Ch. 5)

## **Part II: The firm production decision, July 2 – July 7**

### 3. Supply

- Inputs and Production Functions (Ch. 6)
- Costs and Cost Minimization (Ch. 7)
- Cost Curves (Ch. 8)

July 9: Midterm exam covering topics 1-3

## **Part III: Competition, market power, and imperfect markets, July 14 – July 21**

### 4. Perfectly Competitive Markets (Ch. 9-10)

### 5. Market power

- Monopoly (Ch. 11)
- Capturing surplus (Ch. 12)

### 6. Imperfect competition and strategic behavior

- Game theory (Ch. 14)
- Market structure and competition (Ch. 13)
  - Oligopoly Ch. 13.2
  - Monopolistic competition Ch. 13.5

### 7. Externalities and public goods (Ch. 17)

July 23: Comprehensive final exam covering Parts I, II, and III