# **Economics 100B: Microeconomics, Part B**

Fall 2015. Professor Itai Sher

This is the second of three courses in the core microeconomics sequence. It builds on the material presented in Economics 100A. The principal themes of the course will be the theory of production and firms, the markets for factors of production, and the competitive equilibrium reached between producers and consumers in "perfectly competitive" markets.

# **Prerequisites**

Microeconomic principles (Econ 1), Econ 100A, and a year of calculus (either Math 10C or 20C or 21C). Students must have good math skills, and be very comfortable with calculus.

## **Lecture and Discussion Section Schedule**

Lecture	A00	TuTh	12:30p-1:50p	CENTR 115
845755 Discussion	A01	Th	6:00p-6:50p	CSB 002
845756 Discussion	A02	Th	7:00p-7:50p	CSB 002

Please go to the discussion section you are enrolled in. There will be no class meetings on university holidays.

#### **Examinations**

There will be two midterm examinations and a final examination. The midterm exams will take place during the normal class time on Thursday October 22 and Tuesday November 17. The final exam will take place on Friday December 11 at 11:30am-2:29pm.

# Class Website (Ted)

Materials will be posted at https://ted.ucsd.edu/ on the page for Economics 100B. Students should log in regularly and check for announcements.

**Course Materials** (Links to all material other than the textbook are posted on Ted)

- <u>Class Notes</u>. Class Notes, which are closely related to the lectures, are posted on Ted. The graphs and some written segments in the notes are blank, and can be filled during lecture when the material is covered or by watching the video handbook. Lectures will contain additional material not in the notes.
- <u>Intermediate Microeconomics Video Handbook (IMVH)</u>. There are video lectures to accompany the Class Notes. A link to the lectures is posted on Ted. Students should use the video lectures as a supplement to the class lectures.
- <u>Professor Mark Machina's Mathematics Handout.</u> There are also lectures in the IMVH that cover some of the material on the handout (look under A Math Topics). This is the mathematical background for which students are responsible; it will not be covered in lecture. Another good math resource is Martin Osborne's online Math Tutotial: http://www.economics.utoronto.ca/osborne/MathTutorial/index.html. Chapters 1-6 of this book review the calculus tools taught in Math 10ABC or 20ABC that are most important for this course
- <u>Textbook.</u> The text selected by the Economics Department for Econ 100ABC is <u>Intermediate Microeconomics with Calculus: A Modern Approach</u> (Varian). Chapters 1, 9, 16-23, 26, and 31-33 are relevant for Econ 100B. Students should think of the textbook as supplementary material. Other calculus-based textbooks can be used in place of Varian, including Nicholson's <u>Microeconomic Theory</u>

and Perloff's *Microeconomics: Theory and Applications with Calculus*. One free option is an online introductory textbook written by Preston McAfee, available at: http://www.introecon.com/. The level of this book is between Econ 1 and Econ 100.

### Piazza

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TAs, and myself. Rather than emailing questions to me or the TAs, please post your questions on Piazza. Piazza offers students the opportunity to answer questions posed by classmates. If you are one of the students in the top 25% of number of "good" answers (marked by me or the TAs), you will earn a bonus equivalent to 1% of the class grade, and if you are in the top 10%, you will earn a bonus equivalent to 2% of the class grade. There is a link to Piazza on Ted.

## **Problem Sets**

Problem sets will be assigned on Fridays, and answers will be posted the following Friday. Problem sets will not be graded and students do not need to submit them. However, students should think of the problem sets as if they are due in the discussion section the following week. In discussion section, the TAs will go over some of the problems. You will be much better prepared for the exams if you attempt the problem sets before seeing the answers. Working on the mathematical exercises is a critical part of the learning process, so students are strongly urged to take problem sets seriously.

# **Grading Weights**

Midterm 1 is worth 30% of your grade, Midterm 2 is worth 30% of your grade. The final exam is worth 40% of your grade. In addition, you can earn extra credit on Piazza (see above). The class will be graded on a curve.

## **Teaching Assistants and Contact Information and Office Hours**

The TAs for this class are:

Sieuwerd Gaastra

Office Hours: Friday 1pm-3pm, Econ 125

Dodge Cahan

Office Hours: Tuesday 10am -12pm, Econ 128

Yuehui (Amber) Wang

Office Hours: Wednesday, 4pm-6pm, SH 224

yuw263@ucsd.edu

yuw263@ucsd.edu

If you cannot make these office hours, you can attend the office hours for the other section of Econ 100B:

Veena Jeevanandam Office Hours: Wednesday,12pm-2pm, SH 227 Wei You Office Hours: Monday 1:30pm-3:30pm, Econ 125

Stephanie Khoury will manage Piazza for this class.

## **Sher's Office Hours and Location**

Thursdays: (i) 9:00-11:00 am in Econ 113 and (ii) 2:10-3:10 pm in Center Hall 201.

### **How to Succeed in the Course**

Doing well in this course requires regular attendance at lectures and discussion sections, watching the on-line lectures, and solving practice problems. Working through the mathematical exercises is a particularly important part of the learning process. It is not enough to glance at the solutions to the exercises. Students should work on as many exercises as they can before the discussion sections and before looking at solution keys. In general, you should take an *active* approach to the material. This involves testing yourself to make sure that you understand the material, translating what you read and learn in lectures into your own words, identifying what you don't understand and working on it until you do, and working on exercises.

## **Schedule of Topics and Lectures**

This is a rough schedule of the timing of topics; the material may be covered at a slightly faster or slower pace. The last column gives the corresponding Video Lectures and Sections in the Class Notes. (The Notes and Video Lectures are numbered in the same way; notes cover parts D and E)

<u>Key to the video lecture parts</u>: A Math Topics, B Basics, C Theory of the Consumer, D Theory of the Firm (D1 Production, D2 Cost Functions, D3 Optimal Supply in Markets), E Equilibrium in Competitive Markets (E1 Competitive Equilibrium in a Single Market, E2 General Welfare Analysis), F Beyond the Neoclassical Model.

Dates	Topics	Video Lectures/Class Notes	
September 24	Overview	Parts A and C as needed	
September 29-October 6	The Firm and Production	D1a-m (and A3-4 as needed)	
October 8-20	Theory of Costs (short run, long run)	D2a-l, also A5-6 as needed	
October 22	Midterm Exam 1		
October 27-November 3	Optimal Supply in Competitive Markets	D3a-k, also A5-6 as needed	
November 5-12	Competitive Equilibrium	E1a-j	
November 17	Midterm Exam 2		
November 19-24	Welfare Analysis	E2a-i	
December 1-3	Welfare Analysis	E2j-m	

### **Administrative Notes**

- 1. If you have a documented disability, please bring your documentation to the professor or lead TA so that suitable accommodations can be made. If you believe that you have a disability and desire accommodation, please register with the Office for Students with Disabilities as soon as possible. For information on the steps for academic accommodation, please see http://www-senate.ucsd.edu/manual/appendices/app3.htm.
- 2. Any student found guilty of academic dishonesty in this course will earn a failing grade for the course. In addition to this academic sanction, the Council of Deans of Student Affairs will also impose a disciplinary penalty. For UCSD policy, please see http://www-senate.ucsd.edu/manual/appendices/app2.htm.
- 3. You will only need a writing instrument (pen or pencil) for examinations. No books, notes, or electronic devices (including calculators, headphones, cell phones) are allowed, and students may not consult with each other during the examinations.
- 4. If you arrive late to an exam, you will be allowed to take the exam in the time that remains as long as no one has submitted his/her exam and left the room. If you arrive after someone has submitted an exam, you will earn zero points on the test.
- 5. If you believe that an exam has not been properly graded, you must give a **written note** clearly explaining why your score is in error to your discussion section or TA's office hours **within seven days** from when exams were returned to the class. The professor and TAs will then discuss the question, review your entire exam, and increase or decrease your score as is necessary. You may not ask for another regrade or reinstate your original grade. Hence, by submitting a re-grade request you risk having your score decrease, so consider this decision carefully.
- 6. UCSD has automated wait-lists. If you have any questions regarding adding the class, please contact the undergraduate advisors in Sequoyah Hall 245. The economics department does not allow late additions (additions after the second week) to any class.