

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

Winter 2015, Professor Joel Watson

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. The class emphasizes mathematical analysis in developing the theory; real-world applications will also be discussed.

### **Hybrid Format**

The class will be taught using a hybrid of regular in-class lectures and video lectures from the *Intermediate Microeconomics Video Handbook*, which will be provided via the course ted site.

### **Prerequisites**

Students must have taken the prerequisite courses listed in the UCSD catalog, have good math skills, and be very comfortable with calculus.

### **Class Website**

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

### **Lecture and Discussion Section Schedule**

826547 Lecture	A00	TuTh	2:00p - 3:20p	PETER 108
Discussion	A01	Th	6:00p - 6:50p	LEDDN AUD
Discussion	A02	Th	7:00p - 7:50p	LEDDN AUD

There will be no class meetings on university holidays.

### **Examinations**

There will be three midterm examinations and a final examination. The midterm exams will take place during the normal class time on January 20, February 12, and March 5. The final exam will take place on March 19 at 3:00 p.m. There will be assigned seating for examinations.

### **Problem Sets**

Problem sets will be assigned. They will not be graded and students do not need to submit them. However, 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**

...to be determined.

### **Readings**

The text selected by the Economics Department for Econ 100ABC is *Intermediate Microeconomics with Calculus: A Modern Approach* (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 *Microeconomic Theory*. 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. A free math-preparation book by Martin Osborne is available at: <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.

### **Teaching Assistants and Contact Information**

David Coyne (Econ 124, [dcoyne@ucsd.edu](mailto:dcoyne@ucsd.edu))

Veena Jeevanandam ([vjeevana@ucsd.edu](mailto:vjeevana@ucsd.edu), Econ 113).

Xueying (Shirley) Lu ([xulu@ucsd.edu](mailto:xulu@ucsd.edu), SH 208).

Yuehui (Amber) Wang ([yuw263@ucsd.edu](mailto:yuw263@ucsd.edu), Commons)

Chieh Chen (Brenton) Yu ([ycc010@ucsd.edu](mailto:ycc010@ucsd.edu), location to be determined)

The TAs' office hour information will be posted on the ted website for the course.

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

Thursdays 3:30 – 4:30 p.m. (primary), 9:00 – 10:15 a.m. (secondary), and by appointment. Office hours will usually take place in Sequoyah Hall 244. Otherwise, go to Watson's office. **Please do not disturb Watson outside of office hours unless you have an appointment.**

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

Doing well in this course requires regular attendance at lectures and 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.

### **Honors section (100BH)**

Students who earned an A in Econ 100A are encouraged to take the honors section, 100BH. 100BH is only offered winter quarter. It is a one-unit class that is taken concurrently with this course and is a great opportunity to learn the 100B material in more depth with a faculty member. Honors sections typically include reading and discussing academic research papers. Students have the opportunity to work on skills that are difficult to offer in large classes, such as writing and presenting their work. Since honors sections are capped at 20 students, the instructor gets to know each student very well.

### **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 first discuss this with a TA for the course. If after talking to the TA, you would like to have your exam re-graded, you must submit a re-grade request to the lead TA within seven days from when exams were returned to the class. You must explain clearly why you believe your score is in error. 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.

7. Students should attend and participate in class; their mobile phones and other distracting devices should not. The professor will employ the necessary means to discourage classroom distractions.

### 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 first part of the course (until the first midterm exam) shall be taught in the traditional way, with video lectures available for secondary coverage and review. The second part of the course will be taught in a hybrid format, with video lectures providing the main presentation of topics, and classroom time used for examples and discussion. The format of the third part of the course will be determined shortly before this part begins.

Key to the video lecture parts: 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.

<u>Dates</u>	<u>Topics</u>	<u>Video lectures</u>
January 6	Review and Overview	Parts A and C as needed
January 8-15	The Firm and Production	D1a-m, also A3-4 as needed
January 20	(midterm exam 1)	
January 22-February 3	Theory of Costs (short run, long run) Jan. 22 intensive lecture Jan. 27 examples Jan. 29 intensive lecture Feb. 3 examples	D2a-l, also A5-6 as needed (D2 videos <i>required</i> 1/22-1/27)  (D2 videos <i>required</i> 1/29-2/3)
February 3-10	Optimal Supply in Competitive Markets Feb. 3-5 intensive lecture Feb. 10 examples	D3a-k, also A5-6 as needed (D3 videos <i>required</i> 2/3-2/10)
February 12	(midterm exam 2)	
February 17-24	Competitive Equilibrium	E1a-j videos <i>required</i> 2/17-2/24
February 26-March 3	Welfare Analysis	E2a-i videos <i>required</i> 2/26-3/3
March 5	(midterm exam 3)	
March 10-12	Welfare Analysis	E2j-m videos <i>required</i> 3/10-3/12

Also, students must understand Sections F-H of Machina's Econ 100ABC math handout:  
[http://www.econ.ucsd.edu/~mmachina/courses/ECON\\_100B/ECON\\_100B\\_Math\\_Handout.pdf](http://www.econ.ucsd.edu/~mmachina/courses/ECON_100B/ECON_100B_Math_Handout.pdf)  
This material will be utilized during the course.