

ECONOMICS 100A: MICROECONOMICS, Summer 2013

Lecture: Tuesday, Thursday 11:00-1:50am Solis 107

Discussion: Wednesday 2:00-3:50 am Center Hall 109

Instructor:

Dr. Melissa Famulari Office: Econ 221 Hours: Monday 11:00a-2:00p email: mfamulari@ucsd.edu

Graduate TA:

Michael Furchtgott Office: Econ 122 Hours: Tuesday 2:00-5:00p email: mfurchtg@ucsd.edu

Prerequisites: Microeconomic principles (Econ 1) and a year of calculus (either Math 10C or 20C or 21C).

Assessment: There is one in-class midterm exam on Thursday, July 18th worth 36% of your grade. There are six online quizzes and the top 4 account for 8% of your grade. The final exam is cumulative and is worth 56% of your grade. The final exam is August 3rd from 11:30a - 2:30p (location TBA).

Course Objectives: As the first class in the micro sequence, Econ 100A is designed to teach you how to set up, solve and analyze optimization models and apply these mathematical models to the theory of the consumer (commodity demand, labor supply and consumption/savings decisions). Finally, we will examine the fundamentals of decision making under risk and uncertainty.

Course Materials:

Required Textbook and Reading:

- (1) Perloff, Jeffrey, *Microeconomics: Theory and Applications with Calculus* (2nd Ed.). There is a custom version (a new cover, identical book) at the bookstore for \$106.75.
- (2) Machina, Mark (2010), *Math Handout*

Additional Readings:

Other calculus-based intermediate textbooks that you could use to supplement Perloff include Nechyba's *Microeconomics: An Intuitive Approach with Calculus*, Nicholson and Snyder's, *Microeconomic Theory*, and Binger and Hoffman's, *Microeconomics with Calculus*. One free option is an online introductory textbook written by Preston McAfee of Google <http://www.introecon.com/>. He wrote this while at Caltech and the level is between Econ 1 and Econ 100A. It is very interesting, free, and you may find it useful.

Mandatory Discussion Sessions: These mandatory sessions are conducted by Michael Furchtgott who will go through discussion section handouts and answer your questions regarding lectures, the textbook, homework problems and old exam problems.

Ted: This is where you access the syllabus, class handouts, your grades, homework assignments, etc. I have posted my old 100A exams to give you some additional practice. NOTE: I will not post answers to the old exams. However, we are happy to work on these problems with you during office hours.

Piazza: This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to me or Michael, I encourage you to post your questions on Piazza. Find our class page at: <https://piazza.com/ucsd/winter2013/econ100a/home>

Weekly Homework: It is tremendously important that you keep up with the course and that you practice solving economic problems. We give you two incentives for keeping up.

1. *Online quizzes:* In weeks 2, 4, and 5, I will post a quiz on TED every Monday and Wednesday nights that you must complete between 5:00pm-12:00am. The score on the 4 highest of 6 quizzes will count for 8% of your grade.
2. *Written homework:* Each Thursday we will post homework assignments on Ted. During your discussion section, your TA will work on the homework assignment for that week. We will post the homework

answer key the following Thursday. *These homeworks are voluntary, not graded, but are the most important part of the course. To make the most of your time in this course, do these homeworks.*

Mathematics Tutorial for Economists: Written by Martin Osborne at the University of Toronto
<http://www.economics.utoronto.ca/osborne/MathTutorial/index.html>, Chapters 1-6 of this will help you review the material that you learned in Math 10ABC or 20ABC that are the most important for this course.

Administrative Issues:

- (1) If you have a documented disability, please bring your documentation to me as soon as possible so that I can make suitable accommodations for you. If you believe that you have a disability and desire accommodation, please register with the Office for Students with Disabilities
- (2) Any student found responsible for violating UCSD's academic integrity policy will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty.
- (3) EXAMS
 - a. You must bring your student ID to all exams.
 - b. You may only use a pen/pencil and a straight edge during exams.
 - i. Exams are closed book and you may not use any notes.
 - ii. Exams are electronic-free: you may not use calculators, headphones, cell phones, etc.
 - c. If you arrive late to an exam, I will allow you to take the exam in the time that remains *as long as no one has turned in his/ her exam and left the room*. Once a classmate has turned in his/her exam, you will earn a zero on the test if you arrive late.
 - d. There are no bathroom breaks during midterm exams.
 - e. If there is a mistake adding the points on your exam, bring it to my attention within one week of the exam being returned and I will correct it.
 - f. If you believe your exam has not been graded properly, you may request a re-grade within one week of the exam being returned. I will re-grade your entire exam. The re-graded score will be your grade for the exam. You may not ask for another re-grade or go back to your first grade.

Lecture	Text, Math Handout	Topic
(1) 7/2	Ch.1, 2.1, 2.5 Math Handout: Sects. A, B, C Ch. 3.1, 3.2	I. Introduction II. Consumer Preferences: A. Axioms of Rational Choice B. Utility Functions C. Level Curves of the Utility Function: Indifference Curves D. Marginal Rate of Substitution
7/4		JULY 4th Holiday
(2) 7/9	Ch. 3.3, 3.4, 4.1 Math Handout: Sects. D, E	III. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, CES IV. Budget Constraint V. Mathematical Review of Optimization
(3) 7/11	Ch.4.2, 4.3	VI. Utility Maximization and Demand Functions VII. Comparative Statics of Demand A. Income changes B. Price changes (income and substitution effects)
(4) 7/16		VII. Comparative Statics of Demand (continued) C. Compensated Price Changes and Compensated Demand functions. D. Slutsky Equation
(5) 7/18		Midterm
(6) 7/23		VII. Comparative Statics of Demand (continued) E. Demand Relationships Among Goods F. Elasticity G. Applications
(7) 7/25	Ch. 5.1, 5.2, 5.3, 5.4	VIII. Consumer's Surplus and Deadweight Loss
(8) 7/30	Ch. 5.5	IX. Supply of Labor: The Labor-Leisure Decision
(9) 8/1	McAfee online text: p. 169-173	X. Supply of Saving: The Consumption-Savings Decision

FINAL EXAM: Saturday (8/3/2013) 11:30 am- 2:30 pm. (location TBA)