

ECONOMICS 100A: MICROECONOMICS, SUMMER 2015

MTuWTh 11-12:20pm, Center 115

Instructor:

Dr. Melissa Famulari Office: Econ 221 Hours: M 12:30-3:00 email: mfamulari@ucsd.edu

TA:

Henrique Romero Office: SH 225 Hours: 7/10: 8:30-10:30am email: hromero@ucsd.edu
7/22: 8:30-9:30am
7/29: 8:30-10:30am

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

Assessment: There will be one in-class midterm exam on **Monday, July 7/13** worth 390 points. 3 quizzes account for 60 points of your grade. The final exam is cumulative and is worth 550 points. There is the possibility of extra credit: if you are in the top quarter of the “good answerers” on the Piazza discussion board, I will give you a 10 point bonus. The final exam is **Friday, July 31 from 11:30-2:30**.

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 Material:

- (1) Varian, Hal, *Microeconomics with Calculus*. Varian is a Berkeley Economics Professor and Chief Economist at Google. There is a custom version (a new cover, identical book) at the bookstore for \$84.
- (2) Machina, Mark (2010), *Math Handout*
- (3) Intermediate Microeconomics Video Handbook

Additional Readings:

Other calculus-based intermediate textbooks that you could use to supplement Varian include Nechyba's *Microeconomics: An Intuitive Approach with Calculus*, Nicholson and Snyder's, *Microeconomic Theory*, and Perloff's *Microeconomics: Theory and Applications with Calculus*. A free online option was written by R. Preston McAfee when he was at CalTech (he is now Chief Economist at Microsoft) <http://www.introecon.com/>. The level is between Econ 1 and 100A.

Discussion Sessions Thursday, 2-3:50 in Center 2116. Discussion sections are mandatory and are conducted by Henrique who will work through problem sets and answer your questions regarding lectures, the textbook, videos and old exam problems.

Ted: This is where you access the syllabus, class handouts, your grades, homework assignments, etc. I have also posted my past 100A exams to give you some additional practice. NOTE: I will not post answers to my past exams but 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, Henrique, and myself. Rather than emailing questions to me or Henrique, I encourage you to post your questions on Piazza. If you are one of the students in the top 25% of number of “good” answers, you will earn a 10 point bonus. Find our class page at: <https://piazza.com/ucsd/summer2015/econ100a>

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. *Quizzes:* There will be 3 online quizzes which are worth 20 points each for a total of 60 points.
2. *Written homework:* I will post homework assignments on Ted., typically 2 per week. During Thursday's discussion section, Henrique will work on the homework assignments for that week and I will post the key on Monday. *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, write up your concerns and staple to your exam. Submit for review within one week of the exam being returned.

Week	Text, Math Handout	Video	Topic
(1) 6/29	Ch.1 Math Handout: Sects. A, B, C Ch. 3.1, 3.2, 3.5 Ch. 4 intro, 4.1, 4.2 3.3 3.6 3.4, 4.3 Ch. 2	B1-3 C1a-C1j A2 C1k C2a	I. Introduction II. Consumer Preferences: A. Axioms of Rational Choice B. Utility Functions C. Level Curves of the Utility Function: Indifference Curves D. Slopes of Level Curves: Marginal Rate of Substitution III. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, CES IV. Budget Constraint
(2) 7/6	Math Handout: Sects. D, E Ch. 5 Ch. 6	A3-A4 C2 C3 C4	Quiz 1 Monday, 7/6 V. Mathematical Review of Optimization VI. Utility Maximization and Demand Functions VII. Comparative Statics of Demand A. Income changes B. Price changes
(3) 7/13	Ch 8	C5 C6	MONDAY, 7/13 MIDTERM 1 VII. Comparative Statics of Demand (continued) C. Compensated Price Changes D. Slutsky Equation E. Demand Relationships Among Goods F. Elasticity
(4) 7/20	Ch 14 Ch 9.	C7 C8	Quiz 2 Monday, 7/20 VIII. Compensating and Equivalent Variation, Consumer's Surplus IX. Supply of Labor: The Labor-Leisure Decision
(5) 7/27	Ch 10 Ch 12	C9 C10	Quiz 3 Monday, 7/27 X. Supply of Saving: The Consumption-Savings Decision XI. Decision Making under Risk and Uncertainty

FINAL EXAM: FRIDAY, JULY 31, 11:30-2:30am