

# ECONOMICS 100A: MICROECONOMICS, SUMMER 2015

MTuWTh 11-12:20pm, HSS 1330

## *Instructor:*

Dr. Melissa Famulari    Office: Econ 221    *ZOOM Office hours TBA*    email: [mfamulari@ucsd.edu](mailto:mfamulari@ucsd.edu)  
Econ 221: Tuesday 12:30-2:30

## *TA:*

Vincent Leah Martin    Office: Econ 124    Friday 12-1:00 pm    email: [vleahmar@ucsd.edu](mailto:vleahmar@ucsd.edu)

*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 **Tuesday, July 12** worth 390 points. 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 **Saturday, July 30 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 textbooks to supplement Varian are 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 textbook written by Preston McAfee when he was at CalTech (now Chief Economist at Microsoft) <http://www.introecon.com/> is at a level between Econ 1 and 100A.

*Discussion Sessions:* Friday, 10-12:00 in Solis 104. Discussion sections are mandatory and are conducted by Vincent who will work through problem sets and answer your questions regarding lectures, the textbook, the videos and old exam problems.

*Ted:* This is where you access the syllabus, the Intermediate Microeconomics Video Handbook, 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:* We will use 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 the TA, I encourage you to post your questions on Piazza. If you are in the top quarter of “good” answerer, you will earn a 10 point bonus. Find our class page at: <https://piazza.com/ucsd/summer2016/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 4 online quizzes worth 15 points each for a total of 60 points on quizzes. **If you come to my Zoom office hours and ask a question, I will use the top 3 quiz scores to determine your quiz grade (each quiz will be worth 20 points).** I will send a URL to our meeting space. If you've never used Zoom before you'll need to download the app and install.
2. *Written homework:* I will post homework assignments on Ted., typically 2 per week. During Friday's discussion section, your TA will work on the homework assignments for that week and I will post the key on Sunday. *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 may not use the restroom during the midterm exam. Please let me know if there is some reason that this will cause
  - b. You must bring your student ID to all exams.
  - c. 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.
  - d. 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.
  - e. Grading concerns
    - i. If there is a mistake adding the points on your exam, bring it to my or the TA's attention within one week of the exam being returned and we will correct it.
    - ii. 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) 6/27	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  <b>Quiz 1 Friday, 7/1</b>
(2) 7/5	Math Handout: Sects. D, E  Ch. 5  Ch. 6	A3-A4 C2  C3 C4	<b>Quiz 2 Friday 7/8</b>  V. Mathematical Review of Optimization VI. Utility Maximization and Demand Functions VII. Comparative Statics of Demand A. Income changes B. Price changes
(3) 7/11	Ch 8	C5  C6	<b>TUESDAY, 7/12 MIDTERM 1</b>  VII. Comparative Statics of Demand (continued) C. Compensated Price Changes D. Slutsky Equation E. Demand Relationships Among Goods F. Elasticity
(4) 7/18	Ch 14  Ch 9.	C7  C8	<b>Quiz 3, Monday 7/18</b>  VIII. Compensating and Equivalent Variation, Consumer's Surplus  IX. Supply of Labor: The Labor-Leisure Decision
(5) 7/25	Ch 10  Ch 12	C9  C10	<b>Quiz 4 Monday, 7/25</b>  X. Supply of Saving: The Consumption-Savings Decision XI. Decision Making under Risk and Uncertainty

**FINAL EXAM: Saturday, JULY 30, 11:30-2:30am**