

# ECONOMICS 100A: MICROECONOMICS, SUMMER 2019

Lecture: MTuWTh 11-12:20pm, Peterson 103

Discussion Sections: Friday 10-11:50pm, Peterson 103

*Instructor:* Dr. Melissa Famulari

*email:* mfamulari@ucsd.edu

*Office:* Econ 221

*Office hours:* Monday 4-6pm (in-person and online via Zoom)

*TA:* Jackson Somers

*email:* jsomers@ucsd.edu

*Office:* Sequoyah Hall 207

*Office hours:* Friday 12-2:00pm

*SI Group Leader:* Yanzhi Ding

*email:* yad027@ucsd.edu

*SI group sessions:* Thursday 2-3:20, Center 316

*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 **Thursday, August 22** worth 380 points. Quizzes count for 60 points of your grade. The final exam is cumulative and is worth 560 points. There are two opportunities for extra credit. First, you will earn a 10 point bonus if you are in the top quarter of the “good answerers” on the Piazza discussion board. Second, I will give a 10 point attendance bonus if you are in class most of the time I randomly check. The final exam is **Saturday, September 7 from 11:30am-2:30pm**.

*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 professor and the Chief Economist for Google. There is a custom version (a new cover, identical book) at the bookstore for \$84. We use this book in 100ABC and, at the end of the sequence you can sell the book back to the bookstore for half price. This means that the cost to use the book per quarter is  $(\$84 - \$42)/3 = \$14!!!$
- (2) Machina, Mark (2010), *Math Handout*
- (3) *Intermediate Microeconomics Video Handbook (IMVH)*. The IMVH is over 220 videos created by UC San Diego faculty on the 100ABC material. A link to the video handbook is in Canvas.

### *Additional Readings:*

Other textbooks to supplement Varian's 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 <http://www.introecon.com/> is at a level between Econ 1 and 100A.

*Discussion Sessions:* Friday 10-11:50pm, Peterson 103. Discussion sections are mandatory and are conducted by your TA who will work through problem sets and answer your questions regarding lectures, the textbook, the videos and old exam problems.

*Supplemental Instruction Study Group:* On Thursdays, 2-3:20pm, Center 316 there will be a collaborative study session facilitated by you supplemental instruction leader, Yanzhi Ding. Learn more about Supplemental Instruction [here](#).

*Canvas:* This is where you access the syllabus, the Microeconomics Video Handbook, class handouts, your grades, homework assignments, etc. I post my past 100A exams to give you some additional practice but I do not post answers. We are happy to work on these problems with you during office hours and in section.

*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 answerers, you will earn a 10 point bonus (be sure to use your UCSD e-mail when you sign up so I can give you the extra credit). Find our class page at: <https://piazza.com/ucsd/summer2019/econ100a/home>

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

1. *Quizzes:* There will be one in-class prerequisite quiz on Tuesday, August 6, and three online quizzes on Monday nights (8/12, 8/19, 9/2). Quizzes are worth 15 points each for a total of 60 points. Online quizzes can be taken anytime between 4:00 pm and midnight. **Once you open an online quiz, you have one hour to complete it.**
2. *Written homework:* I will post 1-2 homework assignments on TritonEd each week. During Friday's discussion section, your TA will work through selected problems from that week's homework 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.
3. *Attendance checks:* Download the Canvas app and search for UC San Diego.

*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 who violates UC San Diego's academic integrity policy will earn a failing grade for the course. In addition to my academic penalty, the Council of Deans of Student Affairs impose a disciplinary penalty.
- (3) EXAMS
  - a. You may not use the restroom during the midterm exam. Please let me know as soon as possible if this will create a problem for you.
  - b. You must bring your STUDENT ID to the midterm and final.**
  - c. You may only use a pen/pencil and a straight edge (e.g., a ruler, your student ID) 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. We will be using Gradescope this quarter. If you believe there is a grading mistake on a question, let us know **within one week of the exam being returned**.
    - i. If the TA agrees that there is a grading mistake, it will be corrected immediately.
    - ii. If the TA disagrees that there is a grading mistake, we will deduct two points from your midterm exam and five points from your final exam.

Week	Text, Math Handout	Video	Topic
(1) 8/5	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	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  <b>Prerequisite Quiz: Tuesday 8/6, in-class</b>
(2) 8/12	Math Handout: Sects. D, E  Ch. 5  Ch. 6	C2a A3-A4 C2  C3 C4	<b>Quiz 1: Online Monday 8/12</b>  IV. Budget Constraints V. Mathematical Review of Optimization VI. Utility Maximization and Demand Functions VII. Comparative Statics of Demand A. Income changes B. Price changes
(3) 8/19	Ch 8	C5  C6	<b>Quiz 2: Online Monday 8/19</b>  VII. Comparative Statics of Demand (continued) C. Compensated Price Changes D. Slutsky Equation E. Demand Relationships Among Goods F. Elasticity  <b>THURSDAY, 8/22, in-class MIDTERM</b>
(4) 8/26	Ch 14  Ch 9.	C7  C8	VIII. Compensating and Equivalent Variation, Consumer's Surplus  IX. Supply of Labor: The Labor-Leisure Decision
(5) 9/2	Ch 10  Ch 12	C9  C10	<b>Quiz 3: Online Monday, 9/2</b>  X. Supply of Saving: The Consumption-Savings Decision XI. Decision Making under Risk and Uncertainty

**FINAL EXAM: Saturday, September 7, 11:30am-2:30pm**