

# ECONOMICS 100A: INTERMEDIATE MICROECONOMICS, SUMMER 2020

Lecture: MTuWTh 2:00-3:20 p  
Discussion Sections: Fridays 2:00-3:50 p

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<i>TAs:</i>	Zack Goodman	<i>email:</i> <a href="mailto:zgoodman@ucsd.edu">zgoodman@ucsd.edu</a>	<i>Office hours:</i> Tuesday 8-10am (attends Tuesday lecture)
	Jacob Orchard	<i>email:</i> <a href="mailto:jdorchar@ucsd.edu">jdorchar@ucsd.edu</a>	<i>Office hours:</i> Thursday 5:40-6:40am Wednesday 1-2pm (attends Wednesday lecture)
	Frederick Papazyan	<i>email:</i> <a href="mailto:fpapazya@ucsd.edu">fpapazya@ucsd.edu</a>	<i>Office hours:</i> Monday's 6-8pm (attends Thursday lecture)
	Jianan Yang	<i>email:</i> <a href="mailto:jiy346@ucsd.edu">jiy346@ucsd.edu</a>	<i>Office hours:</i> Thursday 7-9pm (attends Monday lecture)
<i>SI Leader:</i>	Heather Song	<i>email:</i> <a href="mailto:y5song@ucsd.edu">y5song@ucsd.edu</a>	<i>SI sessions:</i> Wednesday 11a-12:20p

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

*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 Modifications for COVID-19:* As you know, we are in the middle of a global COVID-19 pandemic, which has required dramatic changes to how we teach and learn. All instruction will be conducted remotely using Zoom and Canvas. My goal is to provide as high quality an intellectual experience for you as would have been the case if we were meeting in person. I am adding design elements to the course to create a greater sense of intellectual community despite the lack of personal proximity in a classroom.

Here is my plan for how I expect instruction, student engagement, and grading to work.

- Lecture, discussion sections, and SI group sessions will be live on Zoom at the scheduled time. Sessions will be recorded and available via the Media Gallery typically 1-2 hours after the live session
- TA and my office hours will not be recorded

*Lectures:* MTuWTh, 2:00 – 3:20pm. I typically have an interactive classroom where each lecture includes a part where you work with your neighbors solve a problem relevant to the day's lecture. I hope to continue this with only a slight modification by using breakout rooms and having each group post their answers to a shared google document.

*Discussion Sessions:* Fridays, 2-3:50pm. Discussion sections are mandatory and conducted by graduate students in the Econ PhD program who will work through problem sets and answer your questions regarding lectures, the textbook, the videos, old exam problems, etc. The last discussion section will be the final exam review.

*Supplemental Instruction Study Group:* Wednesdays, 11am-12:20pm. Heather Song (undergraduate SI leader) will facilitate a collaborative study session [here](#). Learn more about Supplemental Instruction [here](#).

## Course Materials:

### Required Material:

- (1) Perloff, Jeffrey, *Microeconomics: Theory and Applications with Calculus*, 5<sup>th</sup> edition. E-book available via Redshelf on our Canvas page. Purchase price \$47 for 4 year access (the same book will be used in 100B and 100C if you take them in fall and winter, respectively). This is an opt-out system and so be sure to opt out in time if you do not want to be charged for the textbook.
- (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. The videos in Math Topics (Section A) and Consumer Theory (Section C) are relevant for 100A. A link to the IMVH is in Canvas.

### Additional Readings:

Other textbooks to supplement Perloff's are Nechyba's *Microeconomics: An Intuitive Approach with Calculus*, Nicholson and Snyder's, *Microeconomic Theory*, and Varian's *Microeconomics with Calculus*. Another option, between our principles and intermediate micro textbooks, is a free online textbook written by Preston McAfee for his CalTech principles class <http://www.introecon.com/>

**Canvas:** This is where you access the syllabus, the Intermediate Microeconomics Video Handbook (IMVH), quizzes, 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 discussion section.

**Piazza:** We will use Piazza for class discussion. Because many students likely share your question, please post questions on Piazza. If you are in the top quarter of good answerers, you will earn a 10 point bonus (you have to use your UCSD e-mail when you sign up so I can award you the extra credit). Find our class page at: <https://piazza.com/ucsd/summer2020/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 a prerequisite math quiz during class time on Tuesday, August 4, and three online quizzes on Monday nights (8/10, 8/17, 8/31). Online quizzes are worth 30 points each for a total of 90 points. Online quizzes can be taken anytime between 4:00 pm and 4:00 am). **Once you open an online quiz, you have one hour to complete it.**
2. **Written homework:** I will post 1-2 homework assignments on Canvas each week. During Friday's discussion section, your TAs will work through selected problems from that week's homework and I will post the key(s) on Sunday. There are 3 problem set assignments worth 30 points each. Each week I will let you know which problems you need to turn in to be graded. For credit, you must upload your problem set answers to Gradescope by Saturday.

**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.

### Assessment:

	Date	Course points
Remote Instruction Survey	Monday, August 3	10
Prerequisite Quiz	Tuesday, August 4, 3-3:20pm	10
3 Online Quizzes	Monday, August 10	30
	Monday, August 17	30

	Monday, August 31	30
3 Problem Sets	Saturday, August 8	30
	Saturday, August 15	30
	Saturday, August 29	30
Midterm	Thursday, August 20, 2-3:20pm	350
Final Exam	Saturday, September 5, 3-6pm	450

### **Administrative Issues:**

- (1) *Students with a disability:* 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) *Integrity Violations:* Any student who violates UC San Diego's academic integrity policy will earn a failing grade for the course. In addition to this academic penalty, the Council of Deans of Student Affairs will impose a disciplinary penalty.
- (3) *Proctoring:* Proctoring in the remote environment is challenging. I believe that having you proctor yourself via a Zoom recording (where you share your screen, show yourself taking the exam and keep yourself unmuted) that you submit at the end of the test provides the best balance of maintaining integrity and your privacy. On Canvas, I have detailed instructions about how to proctor yourself via Zoom. There are a lot of steps for you to convince me that you took your exam with integrity! So we will practice this proctoring method for the prerequisite quiz so that you are ready to create your proctoring video for your midterm and final exam. Please e-mail me if this proctoring method will not work for you and we will come up with an alternative method to maintain integrity of your exam.

Note: Zoom uses both video and audio recording or other personal information capture for the purpose of facilitating the course and/or test environment. UC San Diego does not allow vendors to use this information for other purposes. Your proctoring video will be in your MyMedia and so you control access to your video at all times. Please delete your proctoring video at the end of the course.

If I suspect an integrity violation, I will submit your recording to the academic integrity office and it will become part of your administrative disciplinary record. Finally, I reserve the right to give an oral test if I feel it is necessary to uphold academic integrity.

**Stay Honest:** Even good students can be tempted to cheat, but I urge you to take yourself and your education. [Here are tips to support you](#)

### **(4) Exams**

- a. You may not use the restroom during the midterm exam (80 minutes). For the final exam (120 minutes), I will divide it into two parts and we will take a break in between the two parts. Please let me know as soon as possible if this will create a problem for you.
- b. You must have your UCSD ID to show at the start of the midterm and final.**
- c. You may ONLY use a pen/pencil, paper, and a ruler to take your exams. To create your proctoring video, you will use your computer.
- d. Grading concerns. We are using Gradescope this quarter. If you believe there is a grading mistake on a question, let us know **within two days 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) 8/3	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>Remote Instruction Survey: Monday 8/3</b> <b>Prerequisite Quiz: Tuesday 8/4, class time</b> <b>Problem Set 1: Saturday, 8/8</b>
(2) 8/10	Math Handout: Sects. D, E  Ch. 5  Ch. 6	C2a A3-A4 C2  C3 C4	<b>Quiz 1: Online Monday 8/10</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  <b>Problem Set 2: Saturday, 8/15</b>
(3) 8/17	Ch 8	C5  C6	<b>Quiz 2: Online Monday, 8/17</b>  VII. Comparative Statics of Demand (continued) C. Compensated Price Changes D. Slutsky Equation E. Demand Relationships Among Goods F. Elasticity  <b>MIDTERM: Thursday, August 20, class time</b>
(4) 8/24	Ch 14  Ch 9.	C7  C8	VIII. Compensating and Equivalent Variation, Consumer's Surplus  IX. Supply of Labor: The Labor-Leisure Decision  <b>Problem Set 3: Saturday, 8/29</b>
(5) 8/31	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  <b>FINAL: Saturday, Sept 5, 11:30am-2:30pm</b>

