# **ECONOMICS 100A: MICROECONOMICS, Spring 2023**

Section A00: Tuesday, Thursday 12:30-1:50, Ledden Auditorium Section B00: Tuesday, Thursday, 2:00-3:20, Ledden Auditorium

Instructor:

Dr. Melissa Famulari email: mfamulari@ucsd.edu Office Hours: Thursday 4:00-7:00 pm (Econ 221 & Zoom)

Graduate TAs:

Fulvia Budillon email: fbudillo@ucsd.edu Office Hours: Monday 9-11am in Econ 122
Danil Dmitriev email: ddmitrie@ucsd.ed Office Hours: Wednesday 4-6pm in Econ 125

Cole Dreier email: <a href="mailto:cdreier@ucsd.edu">cdreier@ucsd.edu</a> Office Hours: Wednesday 1-3 pm in Sequoyah Hall 232 10am-12pm Sequoyah Hall 231 10am-12pm Sequoyah 11am-12pm Se

*Undergraduate TA:* 

Haicheng Xu email: hax004@ucsd.edu Office Hours: Friday 11am-1pm (room tbd)

Supplemental Instruction (SI): (an undergraduate who has done well in 100A and been trained in SI)

Diya Anup Monday 4:30-5:50pm in Center Hall 316

Thursday 4:30-5:50pm over Zoom https://ucsd.zoom.us/j/92474157751

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

Course Objectives: 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.

# **Required Course Materials:**

- (1) Perloff's *Microeconomics: Theory and Applications with Calculus*, 5<sup>th</sup> edition. The e-book is on our class web in the Redshelf module. The e-book costs \$32.94 and you have access for 540 days (this book will be used in 100B in Fall 2023 and 100C in Winter 2024 at a minimum). You must opt-out **by April 15<sup>th</sup> before midnight or you will be charged for the book** (you can use the e-book for free for the first two weeks).
- (2) Machina, Mark (2010), Math Handout (access in the Web Links Module in Canvas or in the IMVH)
- (3) *Intermediate Microeconomics Video Handbook (IMVH)*. 220-shortish videos that cover the entire 100ABC sequence created by me and five other UCSD faculty in 2014. A link to the video book is in Canvas.
- Mandatory Lecture: I will present the course materials and you will work with your classmates to solve problems. Lectures are not podcasted and lecture notes are not provided. If you miss lecture, please watch the IMVH and read the textbook to catch up.
- Mandatory Discussion Sessions: Graduate TAs work through problem sets and answer your questions regarding lectures, the textbook, homework problems and old exam problems. Please go to the discussion section you are enrolled in.
- Canvas: Where you access the syllabus, class handouts, your grades, homework assignments, etc. I post past 100A exams to give you some additional practice, but I do not post answers to my old exams. The TAs and I are happy to work on these old exam problems with you during office hours and discussion section.
- *Piazza*: We will use Piazza for class discussion. Piazza is designed to get you help quickly and efficiently from classmates, the TAs, and myself. There is a link in Canvas
- 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 6 online quizzes (see below) and the top 5 count towards your final grade
  - 2. Written homework: Each Saturday we will post homework assignments on Canvas. During your discussion section,

your TA will work on the homework assignment for that week. We will post the homework answer key the following Saturday. *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.

### Assessment:

Top 5 of 6 online quizzes	50 points
Midterm 1 (Monday, April 24 from 7:00-8:20 pm)	225 points
Midterm 2 (Monday, May 15 from 7:00-8:20pm)	225 points
Final Exam (Saturday June 10, 11:30-3:30)	500 points

There are two ways to earn extra credit

- (1) Attendance bonus: 10 points if you are in class most of the times when I check attendance.
- (2) Piazza Bonus: 10 points if you are in the top 25% of "good answerers" in the course.

Online Quizzes: Quizzes are available on Canvas on Mondays starting at 4pm and are open until Tuesday at 1am. Once you start the quiz, you have one hour to complete it. Your score and answers will be available Tuesday before class.

<u>Mathematics Tutorial for Economists</u>: Written by Martin Osborne at the University of Toronto, Chapters 1-6 of this will help you review the material from Math 10ABC or 20ABC that is the most important for this course.

<u>Intro to Econ:</u> Written by Preston McAfee, Distinguished Scientist at Google, when he was a professor at CalTech. Free and at a level between our Econ 1 and 100A classes

# Future Opportunities:

100AH: If you earn an A/A- grade in my class this quarter, I recommend that you take the one-unit honors class 100AH in the fall. Honors classes are capped at 20 students and you will get to know the faculty member well (**important** for getting informed letters of recommendation). These classes typically have you give a short presentation and write a short paper. Presenting and writing in the major are two valuable skills that are challenging for us to offer in large classes. I recommend you take advantage of the 100AH opportunity.

#### Administrative Issues:

- (1) Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter (paper or electronic) issued by the <u>Office for Students with Disabilities</u>. Students are required to discuss accommodation arrangements with me and the Economics Department's OSD liaison (<u>Kenny Jones</u>) in advance of any exams or assignments.
- (2) Students who <u>violate academic integrity</u> will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty.

# (3) EXAM POLICIES

- You must bring your **UC San Diego student ID** to all exams.
- You may only use a pen/pencil and a straight edge during exams.
- Exams are closed book and you may not use any notes.
- Exams are electronic-free: you may not use calculators, headphones, cell phones, etc.
- 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.
- There are no bathroom breaks during midterm exams. Please let me know immediately if this policy will create a hardship for you.
- If you believe a question has not been graded properly, you may submit a regrade request via Gradescope within one week of the exam being returned. If your TA agrees with you, your score will be corrected. If your TA disagrees with you, you will lose 1 point for each midterm regrade request and 5 points for each final regrade request (there are 1000 points for the course).

Week	Text, Math Handout	Video	Topic
	Ch. 1-2 Math Handout: Sects. A, B, C	B1-3	I. Introduction
(1) 4/3 Ch.	Ch. 3.1, 3.2 Math Handout: Sects. D, E	C1a- C1j A2	<ul> <li>II. Consumer Preferences:</li> <li>A. Axioms of Rational Choice</li> <li>B. Utility Functions</li> <li>C. Level Curves of the Utility Function: Indifference Curves</li> <li>D. Slopes of Level Curves: Marginal Rate of Substitution</li> </ul>
			Quiz 1, Monday
(2) 4/10	3.2 (continued)	C1k.	III. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, Quasi- Linear and CES
	3.3	C2a	IV. Budget Constraint
			Quiz 2, Monday
(3) 4/17	Ch. 3.4 (excluding 3.4.4)	A4 C2 A3a-b	V. Mathematical Review of Optimization VI. Utility Maximization and Ordinary Demand Functions
			MIDTERM 1: MONDAY, April 24 from 7:00-8:20 pm
(4) 4/24	Ch. 4.1-4.3		A. General Properties of Ordinary Demand Functions B. General Properties of Indirect Utility Functions
		C3 C4	VII. Comparative Statics of Demand A. Income changes B. Price changes
			Quiz 3, Monday
(5) 5/1	4.3 (continued) 3.4.4	C5-C6	VII. Comparative Statics of Demand (continued) C. Compensated Price Changes D. Slutsky Equation E. Demand Relationships Among Goods
	2.5	A1	F. Elasticity  Quiz 4, Monday
(6) 5/8	Ch 5.1-5.3	C7	VIII. Compensating and Equivalent Variation, Change in Consumer's Surplus
(7) 5/15			MIDTERM 2: MONDAY, May 15, 7:00-8:20pm
	Ch 5.4	C8	IX. Supply of Labor: The Labor-Leisure Decision
(8) 5/22	Ch 15.2		Quiz 5, Monday
		C9	X. Supply of Saving: Consumption-Savings Decision
(9) 5/29			Quiz 6, Monday
	16.1-16.3	C10	XI. Decision Making under Risk and Uncertainty
(10) 6/5			Wrap up and review

Final Exam: Saturday, June 10 from 11:30-3:30