# **ECONOMICS 100A: MICROECONOMICS, Winter 2016**

Lecture 1: Tuesday, Thursday 11:00-12:20pm, Solis 107 Lecture 2: Tuesday, Thursday 12:30- 1:50pm, Solis 107

#### Instructor:

Dr. Melissa Famulari Office: Econ 221 email: mfamulari@ucsd.edu

Office Hours: Friday 9:00-12:00 except for 1st Friday of the month. Instead of the 1st Friday of the month, I will

hold office hours on the following Monday from 10:00-12:00.

#### Graduate TAs:

Roy Allen	email: rhallen@ucsd.edu	Office: Econ 126	Hours: TBA
Elizabeth Hastings	email: ehasting@ucsd.edu	Office: SH 237	Hours: TBA
Vincent Leah-Martin	email: vleahmar@ucsd.edu	Office: Econ 124	Hours: TBA
Kaitlyn Lewis	email: kelewis@ucsd.edu	Office: Econ 117	Hours: TBA
John N Rehbeck	email: jrehbeck@ucsd.edu	Office: SH 207	Hours: TBA
David Stowitts	email: dstowitts@ucsd.edu	Office: SH 224	Hours: TBA

## Undergraduate TAs:

Rupneen Kaur	email: <u>ruk002@ucsd.edu</u>	Office: Tutor Lab	Hours: Check TED
Jennifer Lieu	email: <u>jllieu@ucsd.edu</u>	Office: Tutor Lab	Hours: Check TED
Tiffany Ma	email: mim023@ucsd.edu	Office: Tutor Lab	Hours: Check TED
Hainuo Pei	email: <u>hpei@ucsd.edu</u>	Office: Tutor Lab	Hours: Check TED
Rusty Wang	email: qiw030@ucsd.edu	Office: Tutor Lab	Hours: Check TED
Yolanda Xue	email: <u>z3xue@ucsd.edu</u>	Office: Tutor Lab	Hours: Check TED

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

Assessment: There are two in-class midterm exams: **Tuesday, January 26**<sup>th</sup> and **Tuesday, February 16**<sup>th</sup>. Each midterm is worth 230 points of your grade. There are 3 quizzes which count for 45 points of your grade. The final exam is cumulative and is worth 495 points. 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 dates are:

- Final for 11:00 class: Thursday, March 17 from 11:30 am- 2:30 pm.
- Final for 12:30 class: Tuesday, March 15 from 11:30 am- 2:30 pm.

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 Textbook and Reading:

- (1) Varian, Hal, *Microeconomics with Calculus*. There is a custom version (a new cover, identical book) at the bookstore for \$84. Will be used in 100B in SP16 and in 100C in the fall. You can sell the book back to the bookstore for \$42 which means it costs \$14 per quarter to use this book.
- (2) Machina, Mark (2010), Math Handout

### 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 textbook between Econ 1 and 100A, written by Preston McAfee for his CalTech intro class (Preston is now the Chief Economist at Microsoft), can be found at <a href="http://www.introecon.com/">http://www.introecon.com/</a>.

- Mandatory Discussion Sessions: These mandatory sessions are conducted by the TAs who will 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.
- 100A Tutoring Center: M: 4-9:00pm, TU 4-7:00pm, W 6-8:00pm in Econ 200. Undergraduate TAs (and one graduate TA) will be available to answer your questions. There is room for you to work on your homework and get your questions answered if you get stuck.
- *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 and discussion.
- *Piazza:* We will be using 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 TAs, I encourage you to post your questions on Piazza. If the number of times your answers are marked as "good" by me or the TAs is in the top 25% of the class, you will earn a 10 point bonus. Find our class page at: https://piazza.com/ucsd/winter2016/econ100a/home
- *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 graded and 3 ungraded online quizzes (see below)
- 2. Written homework: Each Saturday we will post homework assignments on Ted. 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.
- Quizzes: Quizzes are available online on Mondays and can be taken anytime between 4pm and midnight. Once you start the quiz you have one hour to complete it.
  - If your PID ends in an EVEN number, your quiz grade is based on the first 3 quizzes (q1, q2, q3).
  - If your PID ends in an ODD number, your quiz grade is based on the last 3 quizzes (q4, q5, q6).
- Mathematics Tutorial for Economists: Written by Martin Osborne at the University of Toronto <a href="http://www.economics.utoronto.ca/osborne/MathTutorial/index.html">http://www.economics.utoronto.ca/osborne/MathTutorial/index.html</a>, 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.

# 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 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) 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.
  - d. There are no bathroom breaks during the midterm exams (but let me know immediately if this policy will create a hardship for you).
  - 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, you may request a re-grade within one week of the exam being returned. I will re-grade your entire exam. The re-graded score will be your grade for the exam. You may not ask for another re-grade or go back to your first grade.

Week	Text, Math Handout	Video	Topic
	Ch.1	B1-3	I. Introduction
	Math Handout: Sects. A, B, C		H. Communa Professiona
	Ch. 3.1, 3.2, 3.5	C1a-C1j	II. Consumer Preferences: A. Axioms of Rational Choice
(1) 1/4	Ch. 4 intro, 4.1, 4.2	C1a-C1j	B. Utility Functions
	3.3	A2	C. Level Curves of the Utility Function: Indifference
			Curves
	3.6		D. Slopes of Level Curves: Marginal Rate of
	3.4, 4.3	C1k.	Substitution  Quiz 1, Monday, Jan 11
	3.4, 4.3	CIK.	Quiz 1, Monday, Jan 11
(2) 1/11			III. Common Utility Functions: Cobb-Douglas, Perfect
(2) 1/11	Ch. 2	C2a	Complements (Leontief), Perfect Substitutes, CES
	Math Handout: Sects. D, E	A4	IV. Budget Constraint
	Ch. 5	C2	V. Mathematical Review of Optimization
(3) 1/18	Cn. 5	C2	Quiz 2, Monday, Jan 18
(5) 1/10			VI. Utility Maximization and Demand Functions
			MIDTERM 1, TUESDAY, Jan. 26
(4) 1/25	Ch. 6	C3	VII. Comparative Statics of Demand
		C4	A. Income changes
			B. Price changes
		05.04	Quiz 3, Monday, Feb 1
	Ch 8	C5-C6	VII. Comparative Statics of Demand (continued)
(5) 2/1			C. Compensated Price Changes
(3) 2/1			D. Slutsky Equation
			E. Demand Relationships Among Goods
			F. Elasticity
(6) 2/8	Ch 14	C7	Quiz 4, Monday, Feb 8
	Ch 14		VIII. Compensating and Equivalent Variation, Consumer's
			Surplus
(7) 2/15			
	Ch 9.	CS	MIDTERM 2, Tuesday Feb. 16
	CII 7.	C8	IX. Supply of Labor: The Labor-Leisure Decision
	Ch 10		Quiz 5, Monday February 22
(8) 2/22		C9	
	Ch 12	C10	X. Supply of Saving: Consumption-Savings Decision
(9) 2/29	Ch 12	C10	Quiz 6, Monday Feb 29
			XI. Decision Making under Risk and Uncertainty
(10) 3/8			Wrap up and Review

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