# **ECONOMICS 100A: MICROECONOMICS, Spring 2015**

Tuesday, Thursday 8-9:20 am, Ledden Auditorium

Instructor:

Dr. Melissa Famulari Office: Econ 221 Hours: TU 9:30-12:00 email: mfamulari@ucsd.edu

Graduate TAs <u>email</u>

Naveen Basavanhally
Florian Blume
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Midterm and final reviews
Econ 128, W from 5:00-6:00 & F from 10:30-11:30
Igor Vaynman

No office hours

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Undergraduate TAs

Yunbin PengSH 231: W from 2-3 and F 4:30-5:30yup021@ucsd.eduJunda LiuSH 139: TH 9:30a-11:30ajul155@ucsd.eduChae (Irene) KangSH 139: W & TH from noon-1:00pmcrkang@ucsd.eduYuqing (Spencer) LuSH 244: M from 2-4:00yul165@ucsd.edu

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, April 21** and **Thursday, May 14**. Each midterm is worth 225 points of your grade. Quizzes account for 50 points of your grade. The final exam is cumulative and is worth 500 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 **Thursday, June 11, from 8-11:00am.** 

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*. 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

# 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 option was written by R. Preston McAfee when he was at CalTech (he is now Chief Economist at Microsoft) <a href="http://www.introecon.com/">http://www.introecon.com/</a>. The level is between Econ 1 and 100A.

Mandatory Discussion Sessions: These mandatory sessions are conducted by the TAs who will administer quizzes, 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.

*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.

*Piazza:* This term 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 you are one of the students in the top 25% of number of "good" answers (marked by me or the TAs), you will earn a 10 point bonus. Find our class page at: <a href="https://piazza.com/ucsd/spring2015/econ100a">https://piazza.com/ucsd/spring2015/econ100a</a>

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 5 quizzes given online (I will let you know the dates ahead of time). Performance on the 4 highest quizzes will count for 50 points.
- 2. Written homework: Each Friday 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 Friday. 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 <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.

#### 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*. Once a classmate has turned in his/her exam, you will earn a zero on the test if you arrive late.
- d. There are no bathroom breaks during midterm exams.
- 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, 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) 3/31	Ch.1 Math Handout: Sects. A, B, C	B1-3	I. Introduction  II. Consumer Preferences:
	Ch. 3.1, 3.2, 3.5	C1a-C1j	A. Axioms of Rational Choice
	Ch. 4 intro, 4.1, 4.2	A2	<ul><li>B. Utility Functions</li><li>C. Level Curves of the Utility Function:</li></ul>
	3.3	112	Indifference Curves
	3.6		D. Slopes of Level Curves: Marginal Rate of Substitution
(2) 4/7	3.4, 4.3	C1k.	III. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, CES
		C2a	IV. Budget Constraint
	Ch. 2 Math Handout: Sects. D, E	A4	V. Mathematical Review of Optimization
(3) 4/14	Ch. 5	C2	VI. Utility Maximization and Demand Functions
(4) 4/21			MIDTERM 1 THECDAY Appl 21
			MIDTERM 1, TUESDAY, April 21
	Ch. 6	C3	VII. Comparative Statics of Demand
		C4	<ul><li>A. Income changes</li><li>B. Price changes</li></ul>
(5) 4/28	Ch 8	C5-C6	VII. Comparative Statics of Demand (continued) C. Compensated Price Changes
			D. Slutsky Equation
			<ul><li>E. Demand Relationships Among Goods</li><li>F. Elasticity</li></ul>
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(6) 5/5	Ch 14	C7	VIII. Compensating and Equivalent Variation, Consumer's Surplus
			Consumer a Surprus
(7) 5/12			IX. Supply of Labor: The Labor-Leisure Decision
	Ch 9.	C8	MIDTEDM 2 Thursday May 14
			MIDTERM 2, Thursday, May 14
(8) 5/19	Ch 10	C9	X. Supply of Saving: The Consumption-Savings Decision
(9) 5/26	Ch 12	C10	X. Decision Making under Risk and Uncertainty
(10) 6/2			Wrap up and Review

FINAL EXAM: THURSDAY, JUNE 11, 8:00-11:00am