

## ECONOMICS 100A: MICROECONOMICS, Part A

Winter 2008, Robinson Building Complex Auditorium, MWF 1:00-1:50

### Lecturer:

Dr. Melissa Famulari      [mfamulari@ucsd.edu](mailto:mfamulari@ucsd.edu)      Office: Econ 221  
Office Hrs: MW 2:00-3:30 pm

### Teaching Assistants:

(1) David Eil      [deil@ucsd.edu](mailto:deil@ucsd.edu)      Office: SQH 238  
Office Hrs: Tuesday 9:00-11:00

(2) Benjamin Horne      [bhorne@ucsd.edu](mailto:bhorne@ucsd.edu)      Office: Econ 122  
Office Hrs: Wednesday 9:00-11:00

(3) Michael Madrid      [mmadrid@ucsd.edu](mailto:mmadrid@ucsd.edu)      Office: SH 208  
Office Hrs: Thursday 3:00-5:00

(4) Charles Sprenger      [csprenge@ucsd.edu](mailto:csprenge@ucsd.edu)      Office: SQH 207  
Office Hrs: Monday 4:00-6:00

*Prerequisites:* Econ 1 and either Math 10C, 20C, or 21C.

*Assessment:* There are two in class midterm exams, **Monday, January 28<sup>th</sup> and Wednesday, February 20<sup>th</sup>**, each of which is worth 25% of your grade. The final exam is cumulative and is worth 50% of your grade. The final is **Friday, March 21 from 11:30-2:30**.

*Course Objectives:* As the first of the microeconomic 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:*

Perloff, Jeffrey M. (2007) *Microeconomics: Theory and Applications with Calculus*, Pearson/Addison-Wesley.

Machina, Mark (2006) "Math Handout"

*Additional Readings:* There are many textbooks you can use to supplement Perloff's. Other calculus-based intermediate textbooks include Walter Nicholson's, *Microeconomic Theory*, Hal R. Varian's, *Intermediate Microeconomics* and Binger and Hoffman's, *Microeconomics with Calculus*.

One free option is an online introductory textbook written by Preston McAfee of Caltech <http://www.introecon.com/>. The level of this book is between Econ 1 and Econ 100A. It is very interesting, free, and you may find it useful

*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 calculus tools that you learned in Math 10ABC or 20ABC that are the most important for this course.

*WebCT:* This is where you access the syllabus, class handouts, a discussion board, your grades, homework assignments, etc. I have also posted examples of test questions from my old 100A exams to give you some additional practice.

*Weekly Homework:* I will post homework assignments on WebCT each week by Friday. During your discussion session (see below) the TA's will help you work on the homework assignment for that week. I will post the homework answer key one week after the problem set is assigned.

*Mandatory Discussion Sessions:* These mandatory sessions will be held on Thursdays from 6-6:50 and 7-7:50 in York 2622. The sessions are conducted by your TAs who will answer your questions regarding my lectures, the readings or the assigned problems sets for the week.

*Administrative Issues:*

- (1) If you have a documented disability, please bring your documentation and come to talk 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, Building 202 University Center as soon as possible. For information on the steps for academic accommodation, please see <http://www-senate.ucsd.edu/manual/appendices/app3.htm>.
- (2) Any student found guilty of academic dishonesty will earn a failing grade for the course. In addition to this academic sanction that I will impose, the Council of Deans of Student Affairs will also impose a disciplinary penalty. For a review of UCSD policy, please see <http://www-senate.ucsd.edu/manual/appendices/app2.htm>.
- (3) You will only need a pen or pencil for exams. Since I make copies of your exams, feel free to use a pencil. Exams are closed book and you may not use notes. Exams are completely electronic-free: no calculators, headphones, cell phones, etc. are to be used during an exam.
- (4) 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.
- (5) If there is a mistake adding up the points on your exam, then bring it to my attention within one week of the exam being returned and I will correct it. If you believe an exam has not been graded properly, you may request a regrade within one week of the exam being returned. I will regrade your entire exam. The regraded score will be your grade for the exam. You may not ask for another regrade or go back to your first grade.
- (6) UCSD now has automated waitlists. If you have any questions regarding adding the class, please refer to Triton Link at <https://tritonlink.ucsd.edu/portal/site/tritonlink-preview/menuitem.b4448692267a11256ec5e210514b01ca?storyID=17736%20> or contact the undergraduate advisors in Sequoyah Hall 245. The economics department does not allow late additions (additions after the second week) to any class.

| Week      | Text, Math Handout  | Topic   |
|-----------|---|---|
| (1) 1/7   | Chapter 1 & 2<br>Calculus Appendix, A.1-A.3<br>Chapter 3: 60-74 | I. Introduction<br><br>II. Consumer Preferences:<br>A. Axioms of Rational Choice<br>B. Utility Functions<br>C. Level curves of utility function: Indifference Curves<br>D. Marginal Rate of Substitution<br><br>III. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, CES |
| (2) 1/14  | Chapter 3: 74-75, Calculus Appendix, A.4-A.6<br>Machina Handout | IV. The Budget Constraint<br><br>V. Mathematical Review of Optimization   |
| (3) 1/21  | Chapter 3: 75-89  | <b>No Class Monday: Martin Luther King Day</b><br><br>VI. Utility Maximization and Demand Functions   |
| (4) 1/28  | Chapter 4: 93-110   | <b>Midterm 1: Monday, January 28</b><br><br>VII. Comparative Statics of Demand<br>A. Income changes<br>B. Price changes (income and substitution effects)   |
| (5) 2/4   | Chapter 4: 111-126  | VII. Comparative Statics of Demand (continued)<br>C. Compensated price changes and compensated demand functions.<br>D. Slutsky Equation   |
| (6) 2/11  | Chapter 5: 130-152  | E. Demand Relationships among goods<br>F. Measures of Consumer Welfare  |
| (7) 2/18  | Chapter 5: 152-164  | <b>No Class Monday: President's Day</b><br><br><b>Midterm 2: Wednesday, February 20th</b><br><br>Supply of Labor: The Labor-Leisure Decision  |
| (8) 2/25  |   | Supply of Labor: The Labor-Leisure Decision (continued)<br><br>Supply of Saving: The Consumption-Savings Decision   |
| (9) 3/3   | Chapter 16  | Decision Making under Risk and Uncertainty  |
| (10) 3/10 |   | Decision Making under Risk and Uncertainty (continued)  |

**Final Exam: Friday, March 21<sup>st</sup> from 11:30-2:30 pm**