

## ECONOMICS 100A: MICROECONOMICS, Part A

Spring 2010, Peterson Hall 110, MWF 10:00-10:50

*Lecturer:* Dr. Melissa Famulari  
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Office: Econ 221  
Office Hrs: Tuesday 10-12:30

*Graduate Teaching Assistants:*

(1) Kevin Novan

Office: Sequoyah Hall 238  
Office Hrs: Friday 12-2:00

(2) Ketki Sheth

Office: Sequoyah Hall 237  
Office Hrs: Thursday 8 to 9:30am  
Thursday 3:30 to 5pm

(3) Yi Zhan

Office: Sequoyah Hall 234  
Office Hrs: Monday 1-3:00

*Undergraduate Teaching Assistants:*

(1) Aaron Chan

Office: Sequoyah Hall 139  
Office Hrs: Thurs 10:20-12:20pm

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

*Assessment:* There two inclass midterm exams on **Friday, April 16<sup>th</sup>** and **Wednesday, May 12<sup>th</sup>**, each of which is worth 20% of your grade. The final exam is cumulative and is worth 60% of your grade. The final is on **Monday, June 7<sup>th</sup> from 8-11:00 a.m.**

*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) Perloff, Jeffrey M. (2007) *Microeconomics: Theory and Applications with Calculus*, Pearson/Addison-Wesley.
- (2) Machina, Mark (2006) "Math Handout"

*Additional Readings:*

Other calculus-based intermediate textbooks that you could use to supplement Perloff 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 posted previous quarter's 100A exams to give you some additional practice. NOTE: I will not post answers to the old exams.

*Weekly Homework:* I will post homework assignments on WebCT each week by Friday. During discussion sessions (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 Tuesday 7:00-7:50pm and 8:00-8:50pm in Pepper Canyon Hall room 122. The sessions are conducted by your TAs who will answer your questions regarding my lectures, the textbook readings or the assigned problems sets for the week. Additional practice problems will be gone over.

#### ***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, 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 the 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 so you may not use of calculators, headphones, cell phones, etc. 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.

| Week      | Text, Math Handout   | Topic  |
|-----------|--|--|
| (1) 3/29  | 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 |
| (2) 4/5   | Chapter 3: 74-75, Calculus<br>Appendix, A.4-A.6<br>Machina Handout | III. Common Utility Functions: Cobb-Douglas, Perfect<br>Complements (Leontief), Perfect Substitutes, CES<br><br>IV. The Budget Constraint<br><br>V. Mathematical Review of Optimization                  |
| (3) 4/12  | Chapter 3: 75-89   | VI. Utility Maximization and Demand Functions<br><br><b>Midterm 1: Friday, April 16</b>  |
| (4) 4/19  | Chapter 4: 93-110  | VII. Comparative Statics of Demand<br>A. Income changes<br>B. Price changes (income and substitution effects)  |
| (5) 4/26  | Chapter 4: 111-126   | VII. Comparative Statics of Demand (continued)<br>C. Compensated price changes and compensated<br>demand functions.<br>D. Slutsky Equation   |
| (6) 5/3   | Chapter 5: 130-152   | E. Demand Relationships among goods<br>F. Measures of Consumer Welfare   |
| (7) 5/10  | Chapter 5: 152-164   | <b>Midterm 2: Wednesday, May 12</b><br><br>Supply of Labor: The Labor-Leisure Decision   |
| (8) 5/17  |  | Supply of Labor: The Labor-Leisure Decision (continued)<br><br>Supply of Saving: The Consumption-Savings Decision  |
| (9) 5/24  | Chapter 16   | Decision Making under Risk and Uncertainty   |
| (10) 5/31 |  | Decision Making under Risk and Uncertainty (continued)   |

**Final Exam: Monday, June 7<sup>th</sup> from 8-11:00 a.m.**