

# Economics 100A –Microeconomics A, Summer II 2016

**Aug 1 – Sept 3**

Class meetings: 11:00am - 1:50pm, MW,  
Cognitive Science Building (CSB), Room 002

**Instructor:** Dr. Quazi Shahriar  
Office: Sequoyah Hall 244  
Office Hours: MW, 2:30pm-3:30pm  
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**TA:** Kaitlyn Lewis  
Office: Econ 117  
Office Hours: Thursday, 10:00am-11:00am  
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**Mandatory Discussion Section:** Friday, 10:00am-11:50am (in the classroom)

**Class Web Page:** TritonEd. This is where you have online access to the syllabus, class handouts, your grades, homework assignments, etc. Website: <https://triton.ed.ucsd.edu/webapps/login/>

## COURSE DESCRIPTION:

As the first of the microeconomic sequence, Econ 100A is designed to teach students 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). Finally, we examine the fundamentals of decision making under risk and uncertainty.

## PREREQUISITES:

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

## REQUIRED READINGS:

1. *Microeconomics with Calculus* by Varian, Hal.  
There is a custom version at the bookstore: new one for \$84 to buy and \$75 to rent, and old one for \$63 to buy and \$51 to rent.
2. *Two Math Handouts* Covered in the math review

## ADDITIONAL READING:

1. *Microeconomics: An Intuitive Approach with Calculus* by Nechyba, Thomas J., South-Western, Cengage Learning, 2011.
2. *Microeconomics: Theory & Application with Calculus* by Perloff.
3. A free online book by R. Preston McAfee: <http://www.introecon.com/>. (The level is between Econ 1 and 100A.)
4. Online mathematics tutorial written by Martin Osborne. Look at Chapters 1-6: <http://www.economics.utoronto.ca/osborne/MathTutorial/index.html>

## HOMEWORK:

No graded homework will be assigned. Instead, practice problems will be assigned. Some of these practice problems will be discussed during the discussion section. You are encouraged to practice them in advance and ask questions during the discussion. Forming study groups to practice will also be helpful. Please come and talk to me during my office hours if you would like to discuss practice problems with me.

**DISCUSSION SECTION:**

These mandatory sessions will be conducted by the TA who will answer your questions regarding lectures, the textbook, practice problems and go over quiz/exam solutions (to the extent time permits). Please attend the discussion section.

**QUIZZES:** There will be two quizzes. Dates are **not negotiable**. Quizzes will consist of short-questions (problem solving and conceptual). No multiple-choice questions. Each will be 30-minutes long.

**Quiz 1:** Monday, August 8<sup>th</sup>

**Quiz 2:** Wednesday, August 24<sup>th</sup>

**EXAMS:** There will be one midterm and a cumulative/comprehensive final. Dates are **not** negotiable. Quizzes will consist of problem solving and conceptual questions. No multiple-choice questions. The midterm will be one hour and twenty minutes long. The final will be two hour long.

**Midterm:** Monday, August 15<sup>th</sup> (in the classroom during regular class meeting)

**Final:** Saturday, September 3<sup>rd</sup>, 11:30am - 1:30pm, Center Hall (CENTR) #214.

**ATTENDANCES:** Attendances will be collected few times (as few as once) throughout the session on a random basis.

**GRADES:** Quizzes: 19%, Midterm: 34%, Final: 44%, Attendance: 3%. Grades for the course will be curved.

**ADMINISTRATIVE ISSUES:**

1. If you have a documented disability, please 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.
2. Students found guilty of academic dishonesty will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty.
3. If you need to miss the midterm for a verifiable medical/legal/sports reason, your course grade will be determined based on the final exam. Failure to notify me promptly that you must miss a midterm will result in a zero grade for that midterm. Unexcused absences will also result in a zero.
4. Please don't email me to learn about the lecture notes covered in the class you missed or to get the notes you didn't take during lecture. If you fail to copy some parts of the notes during a lecture talk to me during breaks or right after the class.
5. 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 the exams.

- e. If there is a mistake adding the points on your exam, bring it to the TA's attention in the next class meeting after the exam is returned and we will correct it.
- f. If you believe your exam has not been graded properly and you want like a re-grade, write up your concerns and staple to your exam. You will have to submit for review to the TA by the next class meeting. Realize that re-grading will involve re-grading of the whole exam (not just any particular question) and this may result in your score going up or down compared to the original score.

### **SCHEDULE:**

There are TEN class meetings. Below is a tentative schedule.

<u>Date</u>	<u>Topic</u>
1 Aug.	Mathematical Review #1 Consumer Preferences
3 Aug.	Consumer Preferences
8 Aug.	(QUIZ 1 +) Mathematical Review #2 Utility Maximization and Demand Functions - Part 1
10 Aug.	Utility Maximization and Demand Functions - Part 2
15 Aug.	(MIDTERM +) Comparative Statics of Demand - Part 1
17 Aug.	Comparative Statics of Demand - Part 2
22 Aug.	Comparative Statics of Demand - Part 3 Supply of Labor: The Labor-Leisure Decision
24 Aug.	(QUIZ 2 +) Supply of Capital: Consumption-Savings Decision
29 Aug.	Decision Making under Risk and Uncertainty
31 Aug.	Wrap up & review
3 Sep.	FINAL EXAM (Time: 11:30-1:30, Location: Center Hall (CENTR) #214)

**READING:** Below is a list of the reading for the course. You are expected to keep up with the reading on your own. You are only responsible for sections of the textbook that we talk about in class. (You will find a link for the videos on the course homepage on TED.)

<b>Date</b>	<b>Topic</b>	<b>Text, Math Handout</b>	<b>Video</b>
1 Aug	I. <u>Introduction, Syllabus, Math Review-1</u>	Syllabus Ch.1 Math Handout: Sects. A, B, C	B1-3
	II. <u>Consumer Preferences:</u> A. Axioms of Rational Choice B. Utility Functions	Ch. 3.1, 3.2, 3.5 Ch. 4 intro, 4.1, 4.2	C1a-C1j

3 Aug	<p>II. Consumer Preferences:</p> <p>B. Utility Functions (<i>continued</i>)</p> <p>C. Level Curves of the Utility Function: Indifference Curves</p> <p>D. Slopes of Level Curves: Marginal Rate of Substitution</p> <p>E. Common Utility Functions: Cobb-Douglas, Perfect Complements (Leontief), Perfect Substitutes, CES, etc.</p>	<p>Ch. 4 intro, 4.1, 4.2</p> <p>Ch. 3.3</p> <p>Ch. 3.6</p> <p>Ch. 3.4, 4.3</p>	<p>C1a-C1j</p> <p>A2</p> <p>C1k.</p>
8 Aug	<p><b>QUIZ 1</b> (<i>Math Review &amp; Consumer Preferences</i>)</p> <p>III. <u>Math Review-2: Optimization</u></p> <p>IV. <u>Utility Maximization and Demand Functions-Part 1: Budget Constraint</u></p>	<p>Math Handout: Sects. D, E</p> <p>Ch. 2</p>	<p>A4</p> <p>C2a</p>
10 Aug	<p>V. <u>Utility Maximization and Demand Functions-Part 2</u></p>	<p>Ch. 5</p>	<p>C2</p> <p>A3</p>
15 Aug	<p><b>MIDTERM</b> (<i>Math Review, Consumer Preferences &amp; Utility Maximization and Demand Functions</i>)</p> <p>VI. <u>Comparative Statics of Demand-Part 1</u></p> <p>A. Income changes</p> <p>B. Price changes</p>	<p>Ch. 6</p>	<p>C3</p> <p>C4</p>
17 Aug	<p>VII. <u>Comparative Statics of Demand-Part 2</u></p> <p>C. Compensated Price Changes</p> <p>D. Slutsky Equation</p> <p>E. Demand Relationships Among Goods</p> <p>F. Elasticity</p>	<p>Ch 8</p>	<p>C5-C6</p>
22 Aug	<p>VIII. <u>Comparative Statics of Demand-Part 3</u></p> <p>Consumer's surplus: Compensating and Equivalent Variation, Consumer's Surplus</p> <p>IX. <u>Supply of Labor: The Labor-Leisure Decision</u></p>	<p>Ch 14</p> <p>Ch 9</p>	<p>C7</p> <p>C8</p>
24 Aug	<p><b>QUIZ 2</b> (<i>Comparative Statics &amp; Labor Supply</i>)</p>		

	X. <u>Supply of Saving: The Consumption-Savings Decision</u>	Ch 10	C9
29 Aug	XI. <u>Decision Making under Risk and Uncertainty</u>	Ch 12	C10
31 Aug	Wrap up & review		
3 Sept	<b>FINAL EXAM</b> ( <i>Comprehensive</i> ) 11:30am - 1:30pm Location: Center Hall (CENTR) #214		

**FUTURE OPPORTUNITIES:** Econ 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.