### UNIVERSITY OF COLORADO AT BOULDER Department of Economics Syllabus

Econ 3070-009 Intermediate Microeconomic Theory Fall 2008

#### Instructor

Joyce C. Loh

### Office

Economics Building, Room 306

### Email

<u>lohj@colorado.edu</u>. This is the best way to get in touch with me. During the week, I will do my best to respond within 24 hours to any queries regarding the course. If I don't, it is fair to assume that I didn't receive the message and it should be resent.

### **Office Hours**

Wednesday, 10:00AM ~ 12:00PM. Office hours are held for your benefit. It is an opportunity to come in and ask questions in a one-on-one or small group setting. Everyone is highly encouraged to attend office hours as often as they feel necessary to help master the materials of the course. If there is any reason that you cannot make these office hours, I am willing to meet you by appointment.

### **Class Meeting Time**

Monday, Wednesday and Friday, 9:00AM ~ 9:50AM, ECON 119

#### **Course Website**

I have constructed a CULearn link as the course website. All relevant materials will be posted on it. It is your responsibility to regularly check the information posted online.

### **Course Description**

This course introduces the theoretical framework for analyzing the economic behavior of individual decision-makers, such as consumers and firms. The techniques presented in this course are used by almost every economist and can be applied to many applied fields including international economics, environmental economics, labor economics, and industrial organization.

The course will be divided into five sections. We will begin with a review of calculus. We will then proceed to Section 2, which covers the consumer behavior and the market demand. In this section, we will build a model of consumer choice and use this model to derive the individual demand and the market demand. In Section 3, we will turn our attention to the other side of the market and analyze the behavior of firms and the market supply. We will build a model to show

how each firm decides what technology it should use to produce its product and what quantity of this product to bring to the market. This model will be then used to derive the supply curves of the firm and the market. Section 4 will bring the two sides of the market together to show how the price and the output are determined by the market. The perfect competition of market structure will be examined. If time permits, we will close the semester with an introduction to the general equilibrium and/or other important microeconomic topics.

### **Course Structure**

The course will consist of lectures, readings, assignments, and exams. The lectures will follow the readings in terms of topics covered. However, there may be some materials covered in lecture that will not be covered by the readings, and there will most certainly be some materials in the readings not covered in lecture. Therefore, attending lectures and taking good notes are very important to succeed in this course.

Readings will be primarily from the required textbook. However, I may elect to assign additional readings from other books to supplement the materials in the textbook. The additional readings will be made available on CULearn as needed.

Assignments will take the form of problem sets. In general, assignments will be made available by Friday on CULearn and due in lecture one week later. Solutions will be posted on the course website shortly thereafter.

There will be two in-class midterm exams on Friday, October 10 and Wednesday, November 19 respectively. A cumulative final exam will be on Saturday, December 13.

### Prerequisites

To take this course, you should have taken either Econ 1078 (Math Tools for Economists I) and Econ 1088 (Math Tools for Economists II) or Math 1300 or equivalent for the math preparation, and either Econ 1000 (Introduction to Economics) or Econ 2010 (Principles of Microeconomics) for the economics part.

This course will be taught with mathematical emphasis. You are supposed to be familiar with microeconomic principles, graphs, algebra, calculus and optimization techniques covered in the prerequisite classes, and feel comfortable expressing these concepts in short-answer questions in assignments and exams.

### Textbook

The required textbook is "Microeconomics," the 3<sup>rd</sup> edition, by David Besanko and Ronald R. Braeutigam.

The best reference books will be the textbooks you studied for the past economics and calculus courses.

### Grading

The various components of the course will be weighted as follows to determine your final grade:

Assignments 20%

Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam (mandatory and cumulative)	30%

Each assignment will be graded on a scale from 0 to 10: zero point for not handing it in, 2 point for poor performance, 5 points for average performance, and 10 points for outstanding performance. The lowest two assignment scores will be dropped before the course grades are determined at the end of the semester. You are encouraged to work on the problem sets in small groups. However, you have to turn in your own problem set.

The midterm exam will be graded on a 50-point scale, and the final exam will be graded on a 120-point scale. They will be based on the lectures and the assignments.

I will not curve any single exam or assignment, but the whole class grade will be curved at the end of semester if the average is lower than 70 out of 100. Throughout the semester, I will distribute some handouts or worksheets in class without advance notice. Some of them will be collected before the class is dismissed and counted as attendance or extra credit.

# **Exam Rules**

You are only allowed to bring the (colored) pens, pencils, erasers, white-out, rulers, and basic calculators (see the attached picture). If the calculators you bring to the exams are not the basic ones, I'll take possession of them until you finish the exams. Scratch paper will be provided. If a decimal answer is necessary to complete the question, calculation hints will be provided at the end of each part. You may not need to use all but only some of them to finish one question. If you feel competent at algebra, you may not need a basic calculator at all for the exams.

### Missed Assignments & Exams

Late assignments will not be accepted since the solutions will be posted on the course website shortly after the assignments are due. You may, however, miss two assignments without penalty since your lowest two assignment scores will be dropped.

No make-up exams will be given. If there is a proven emergency or other unusual circumstances that have been discussed with me prior to an exam, no make-up exam will be given but your grades will be reweighed.

#### **Tutoring Resources**

Department of Economics provides a free drop-in tutorial lab for undergraduates enrolled in introductory and intermediate Economics courses at CU-Boulder. The details can be found at http://www.colorado.edu/Economics/undergraduate/index.html, and then click Drop-IN Tutorial Lab (to be updated soon). If you prefer one-on-one tutorial, Department of Economics also keeps a list of graduate students who are willing to tutor the undergrad students in different topics. The list can be found at the same webpage, and then click Tutor List (to be updated soon).

### **Tentative Course Schedule**

	Date		Date		Day	Торіс	Readings	Assignment	
	Aug	25	Mon	Math review	Partial				

				derivatives	
				Partial	
	27	Wed	Math review	derivatives	
	29	Fri	Analyzing economic problems	Ch1	
Sept	1	Mon	Labor Day		
	3	Wed	Demand and supply analysis	Ch2	
	5	Fri	Consumer preferences and the concept of utility	Ch3	Pset 1 due
	8	Mon	Consumer preferences and the concept of utility	Ch3	
	10	Wed	Consumer preferences and the concept of utility	Ch3	
	12	Fri	Consumer preferences and the concept of utility	Ch3	Pset 2 due
	15	Mon	Consumer preferences and the concept of utility	Ch3	
	17	Wed	Consumer choice	Ch4	
	19	Fri	Consumer choice	Ch4	Pset 3 due
	22	Mon	Consumer choice	Ch4	
	24	Wed	Consumer choice	Ch4	
	26	Fri	Consumer choice	Ch4	Pset 4 due
	29	Mon	The theory of demand	Ch5	
Oct	1	Wed	The theory of demand	Ch5	
	3	Fri	The theory of demand	Ch5	Pset 5 due
	6	Mon	The theory of demand	Ch5	
	8	Wed	Q&A for midterm exam 1		
	10	Fri	Midterm exam 1		
	13	Mon	The theory of demand	Ch5	
	15	Wed	Input and production functions	Ch6	
	17	Fri	Input and production functions	Ch6	
	20	Mon	Input and production functions	Ch6	
	22	Wed	Cost and cost minimization	Ch7	
	24	Fri	Cost and cost minimization	Ch7	Pset 6 due
	27	Mon	Cost and cost minimization	Ch7	
	29	Wed	Cost and cost minimization	Ch7	
	31	Fri	Cost and cost minimization	Ch7	Pset 7 due
Nov	3	Mon	Cost curves	Ch8	
	5	Wed	Cost curves	Ch8	
	7	Fri	Cost curves	Ch8	Pset 8 due
	10	Mon	Perfectly competitive market	Ch9	
	12	Wed	Perfectly competitive market	Ch9	
	14	Fri	Perfectly competitive market	Ch9	Pset 9 due
	17	Mon	Q&A for midterm exam 2		
	19	Wed	Midterm exam 2		
	21	Fri	Perfectly competitive market	Ch9	
	24	Mon	Fall break		
	26	Wed	Fall break		
<u> </u>	28	Fri	Fall break		

Dec	1	Mon	Perfectly competitive market	Ch9	
	3	Wed	General equilibrium	Ch16	
	5	Fri	General equilibrium	Ch16	
	8	Mon	General equilibrium	Ch16	Pset 10 due
	10	Wed	General equilibrium	Ch16	
	12	Fri	Q&A for final exam		
	13	Sat	Mandatory and cumulative final exam:		
			Econ 119 at 1:30PM ~ 4:00PM		

# **Honor Code**

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <a href="http://www.colorado.edu/academics/honor.html">http://www.colorado.edu/academics/honor.html</a> and at

### **Expectations of Classroom Behavior**

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which students express opinions. See polices at <u>http://www.colorado.edu/policies/classbehavior.html</u> and at

http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\_code.

### **Religious Observances**

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please notify me as soon as possible so that the proper arrangements can be made. Students can see full details at <a href="http://www.colorado.edu/policies/fac\_relig.html">http://www.colorado.edu/policies/fac\_relig.html</a>.

### **Students with Disabilities**

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services by September 1 so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, or <u>http://www.Colorado.EDU/disabilityservices</u>. Besides, time extensions for exams must be approved by me prior to the exam. If you have not talked to me personally prior to the exam you will not be granted an extension.

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. Other letters/requests you may receive from agencies such as the Wardenburg Student Health Center, or other health providers, such as physicians or counselors, are recommendations you may choose to follow to assist students but are not necessarily legal mandates. The syllabus statements and answers to Frequently Asked Questions can be found at http://www.colorado.edu/disabilityservices.

# **Sexual Harassment**

The University of Colorado Policy on Sexual Harassment applies to all students, staff, and faculty. Sexual harassment is unwelcome sexual attention. It can involve intimidation, threats, coercion, or promises or create an environment that is hostile or offensive. Harassment may occur between members of the same or opposite gender and between any combinations of members in the campus community: students, faculty, staff, and administrators. Harassment can occur anywhere on campus, including the classroom, the workplace, or a residence hall. Any student, staff, or faculty member who believes s/he has been sexually harassed should contact the Office of Sexual Harassment (OSH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the OSH and the campus resources available to assist individuals who believe they have been sexually harassed can be obtained at <a href="http://www.colorado.edu/odh/">http://www.colorado.edu/odh/</a>.

# A Basic Calculator

