# Department of Economics University of Colorado, Boulder

# Economics 3070–006 Intermediate Microeconomic Theory Fall 2007

### **Syllabus**

Professor: Martin Byford Office: Economics 4D

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Lectures: TR 12.30-1.45 HLMS 141

Office Hours: 2–5 Tuesday Course Website: CULearn

### Course Description

All economies are made up of individual decision makers: consumers, firms and regulators whose choices interact to determine all aspects of the societies in which we live. This course introduces a theoretical framework that allows us to model the behavior of individual decision makers. A solid understanding of microeconomics is essential for anyone intending to pursue further studies in economics as many fields including industrial organization, trade, labor and environmental economics are built on microeconomic foundations.

The course begins by introducing the concept of consumer preferences. Preferences drive the choices of every consumer; and taken together, these choices determine market demand. On the supply side of the market it is production technology that drives the behavior of firms; and determines both firm and market supply.

The way in which demand and supply interact to determine price and output depends upon the nature of competition in the market. In this course we will consider the cases of perfect competition, monopoly and oligopoly.

#### Prerequisites

- 1. Econ 1000 or Econ 2010
- 2. Econ 1078 & Econ 1088, or Math 1300, or equivalent

This is a technical subject. Mathematical techniques such as calculus and constrained optimization will be used extensively throughout the course. It will be assumed that all students are familiar with these techniques. Moreover, students should be familiar with the basic concepts and lexicon of microeconomics.

#### Prescribed Text

The prescribed textbook is Microeconomics,  $2^{\rm nd}$  edition by David Besanko and Ronald Braeutigam. The course will follow the prescribed text closely. Students may also be interested in purchasing the companion study guide; although this is not required.

Additional reading may be assigned during the semester. Any additional reading will be listed on the course website.

### Tentative Schedule

The following schedule is tentative and subject to change.

Table 1: Tentative Schedule

Week	Dates	Topics	Readings
1	Aug 28 & 29	Introduction	Ch. 1 & 2
		Demand & Supply	
2	Sept 4 & 6	Preferences & Utility	Ch. 3
3	Sept 11 & 13	Consumer Choice	Ch. 4
		Problem Set 1, due Sept 13	
4	Sept 18 & 20	Theory of Demand	Ch. 5
5	Sept 25 & 27	Inputs & Production Functions	Ch. 6
		Problem Set 2, due Sept 27	
6	Oct 2 & 4	Costs & Cost Minimization	Ch. 7
7	Oct 9 & 11	Cost Curves	Ch. 8
		Problem Set 3, due Oct 11	
8	Oct 16 & 28	Perfectly Competitive Markets	Ch. 9
9	Oct 23 & 25	Competitive Markets: Applications	Ch. 10
		Midterm Exam, in class Oct 25	
10	Oct 30 & Nov 1	Monopoly & Monopsony	Ch. 11
11	Nov 6 & 8	Capturing Surplus	Ch. 12
		Problem Set 4, due Nov 8	
12	Nov 13 & 15	Market Structure & Competition	Ch. 13
13	Nov 20 & 22	Fall Break	
14	Nov 27 & 29	Game Theory & Strategic Behavior	Ch. 14
		Problem Set 5, due Nov 29	
15	Dec 4 & 6	General Equilibrium Theory	Ch. 16
16	Dec 11 & 13	Externalities & Public Goods	Ch. 17
	Dec 18	Final Exam	

#### Assessment

The assessment of this subject consists of three components:

Five problem sets will be assigned throughout the semester. Each problem set will be made available on the course website one week prior to the due date. Problem sets must be handed in at the start of class on the due date. Late problem sets will not be accepted.

A midterm exam, contributing 25% of your final grade, will be held in October. A final exam, contributing 50% of your final grade, will be held in December. Students may not miss exams. No makeup exams will be given.

There is no mark for attendance, however class participation will be noted. All material that is covered, either in class or in the readings, is examinable.

#### **Procedures**

1. If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and,

http://www.colorado.edu/disabilityservices

Disability Services letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at,

http://www.colorado.edu/disabilityservices

2. 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. You must inform me at least seven days in advance of any conflict due to a religious observance in order for alternative arrangements to be made. See full details at,

http://www.colorado.edu/policies/fac\_relig.html

3. Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender variance, and nationalities. See polices at:

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

4. 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:

http://www.colorado.edu/policies/honor.html http://www.colorado.edu/academics/honorcode/

5. 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 Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH and the campus resources available to assist individuals who believe they have been sexually harassed can be obtained at:

http://www.colorado.edu/odh/