ECON 3070-007 INTERMEDIATE MICROECONOMIC THEORY Fall 2006, Department of Economics

University of Colorado at Boulder

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Office hours: TR 9:00-10:30am or by appointment Class time and location: TR 11:00-12:15pm, ECON 119

Class website: http://webct.colorado.edu (please check regularly for updates)

Course Description

Intermediate Microeconomic Theory introduces students to microeconomic concepts and tools used to analyze individual and firm behavior under conditions of scarcity. The course comprises five parts. Part I reviews supply and demand, and mathematical concepts used by economists. Part II examines consumer choice and demand applications. Theory of the firm analyses firm technology, costs and production in Part III. Part IV examines pricing, output and welfare under perfect competition. Market power, structure and price discrimination are covered in Part V. Part VI examines special topics such as general equilibrium and efficiency, externalities and public goods.

Objectives

Learn and apply the basic tools used by economists to understand how agents interact with one another, how they make optimal decisions, and how markets are organized.

Become comfortable using diagrams, algebra, calculus and other mathematical concepts to develop economic models for use in an applied setting.

Develop oral and written communication skills with classroom interaction, homework assignments and examinations.

Prerequisites

Available to students who have completed ECON 100 Introduction to Economics or ECON 2010 Principles of Microeconomics, and either ECON 1078 Math Tools for Economists I and ECON 1088 Math Tools for Economists II, or MATH 1300, or MATH 1310, or MATH 1081, or MATH 1080, 1090, and 1100, or APPM 1350, or equivalent.

Students that do not meet the prerequisites (above) may be administratively dropped from the course.

The course will be taught with mathematical emphasis. Students should be familiar with microeconomic principles, algebra, calculus, integration and optimization techniques covered in prerequisite classes, and be comfortable expressing these concepts in short-answer questions in homework assignments and examinations.

Textbook

The required textbook is *Microeconomics: An Integrated Approach*, 2nd edition, by David Besanko and Ronald R. Braeutigam, 2004, John Wiley & Sons, New York, ISBN 0-471-45769-8.

Closed reserve

Barnett, R. and Ziegler, M., 1995, *Essentials of College Mathematics*, 3rd edition, Macmillan, Upper Saddle River, ISBN 0-02-305931-1.

Besanko, D., and Braeutigam, R., 2004. *Microeconomics: An Integrated Approach*, 2nd edition, John Wiley & Sons, New York, ISBN 0-471-45769-8.

Class requirements

The class meets Tuesday and Thursday, 11:00-12:15pm. Try to select a regular seat in class so it is easier for me to get to know you. Although there is no grade for attendance, attendance and class participation will be duly noted. To receive a passing grade, you are required to attend a minimum of 80 percent of the lectures. A sign-in sheet will be circulated during each class, and it is your responsibility to make sure that you have signed in by the end of class. Please be aware that the critical thinking required for successful completion of this course may not come naturally for many students. Class exposure to model building, applied problems and solutions is one of the best ways to become proficient in the application of microeconomic theory.

Feel free to form study groups to review and discuss lecture/reading material, homework questions, etc., but you must submit individual work for grading. If you work with a study group or individual class mates on homework, please list the names of these persons on the front page of your submitted homework.

Students should:

- (a) attend two 75 minute classes per week;
- (b) read the assigned chapters prior to lectures;
- (c) review and augment notes after lectures;
- (d) complete a student survey(s):
- (e) complete (a minimum of 4 out of 5) homework assignments;
- (f) complete two mid-term examinations; and
- (g) complete one final examination.

Students are also expected to be punctual, polite and prepared to engage in discussion with the instructor and class mates. See http://colorado.edu/policies/classbehavior.html for University of Colorado polices on student classroom and course-related behavior.

Grading

There will be five homework assignments (with the lowest score dropped from the overall grade), two mid-term examinations, and one final examination. The weightings for these assessments are:

Homework assignments	(4 × 10 %)	40 %
Mid-term exam I	(1 × 10 %)	10 %
Mid-term exam II	(1 × 25 %)	25 %
Final exam	(1 × 25 %)	25 %

Mid-term I will consist of multiple-choice (review) questions. Mid-term II and the final examination will consist of short-answer and problem solving questions (similar to homework questions and class applications) that require students to use diagrammatic, mathematical and written skills to prove their answers.

There will be no make-up homework assignments or mid-term examination unless there is a proven emergency or other unusual circumstances that have been discussed with the instructor prior to submission/completion dates. If you aware of any problems that may hinder your performance in the class <u>please discuss with the instructor sooner than later</u>. Any student that misses the mid-term examination due to proven emergency or other circumstances *may* have their final exam re-weighted with instructor approval.

The final examination for ECON 3070-007 is Thursday, Dec 14, 11:00-12.15pm.

Important dates for assessment

Sep 7	Mid-term examination I
Sep 28	Homework 1
Oct 12	Homework 2
Oct 19	Mid-term examination II
Nov 2	Homework 3
Nov 16	Homework 4
Nov 30	Homework 5
Dec 14	Final examination

Religious observances

Campus policy states that every effort shall be made to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Students should notify the instructor of anticipated conflicts as early in the semester as possible so that there is adequate time to make necessary arrangements. The full text of the Boulder campus policy is available at http://www.colorado.edu/policies/fac_relig.html.

Honor code

The University has recently adopted a student Honor Code. Students should familiarize themselves with its tenets at http://www.colorado.edu/academics/honorcode/. Students will be asked to include this pledge on various assignments and tests: "On my honor, as a

University of Colorado at Boulder student, I have neither given nor received unauthorized assistance on this work."

Disability services

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 (303-492-8671, Willard 322, www.colorado.edu/disabilityservices).

Tentative course outline

Proposed topics are provided in Table 1. Please note the course outline is subject to change during the term depending on how fast we work through the proposed topics. All changes will be announced in class and online through http://webct.colorado.edu.

Proposed course outline

Week	Date	Topic Topic	Reading
WCCK	Dute	Part I. Review	Reduing
1.	Aug 29, 31	- Introduction, analytical tools	Ch 1
2.	Sep 5	- Demand & supply	Ch 2
	Sep 7	- Mid-term examination I (review)	
		Part II. Consumer Theory	
3.	Sep 12, 14	- Preferences, utility functions	Ch 3
4.	Sep 19, 21	- Consumer choice	Ch 4
5.	Sep 26, 28	- Demand curve, applications	Ch 5
		Part III. Theory of the Firm	
6.	Oct 3, 5	- Inputs & production functions	Ch 6
7.	Oct 10, 12	- Costs	Ch 7, 8
8.	Oct 17	- Costs	Ch 7, 8
	Oct 19	- Mid-term examination II	
9.		Part IV. Perfect competition	
	Oct 24, 26	- Perfectly competitive markets	Ch 9
10.	Oct 31, Nov 2	- Consumer, producer surplus	Ch 5, 9
11.	Nov 7	- Applications	Ch 10
		Part V. Market Power, Structure & Pricing	
Nov 9	Nov 9	- Monopoly	Ch 11
	Nov 14	- Monopoly	Ch 11
	Nov 16	- Price discrimination	Ch 12
13	Nov 21, 23	- No classes, Fall break	
14.	Nov 28	- Price discrimination	Ch 12
	Nov 30	- Oligopoly, game theory	Ch 13, 14
15.	Dec 5	- Oligopoly, game theory	Ch 13, 14
		Part VI. Special Topics	
	Dec 7	- General equilibrium & efficiency	Ch 16
16.	Dec 12	- Review	Ch 17
	Dec 14	- Final examination	