#### ECON 3070-004 INTERMEDIATE MICROECONOMIC THEORY

## Fall 2007, Department of Economics University of Colorado at Boulder

Class time and location: MWF 11:00-11:50, ECON 119

Instructor	Anna Rubinchik, Assistant Professor	
Office	ECON 121	
E-mail	Anna.Rubinchik@Colorado.edu	
Phone	(303) 735-0220	
Office hours	MW 9:30-11 a.m.	

No class on Friday, September 14.

Class website: http://www.colorado.edu/Economics/courses/rubinchik/econ3070\_4/syl07f-3070.html Link to the list of HW assignments

#### **Course Description**

Intermediate Microeconomic Theory introduces students to the basic 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 analyzes firm technology, costs and production in Part III. Part IV examines pricing and output under perfect competition, general equilibrium and economic welfare. Market power, structure and price discrimination are covered in Part V. Part VI examines special topics such as 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.

The course will be taught with mathematical emphasis. Students should be familiar with microeconomic principles, algebra, calculus, 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*, 2<sup>nd</sup> edition, by David Besanko and Ronald R. Braeutigam, 2005, John Wiley & Sons, New York, ISBN 0-471-45769-8.

### Class requirements

The class meets each MWF 11:00-11:50. Try to select a regular seat in class so it is easier for the instructor 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 the best way 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 (hint: 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).

To succeed the students should

- attend three 50 minute classes per week;
- read the assigned chapters prior to lectures;
- review and augment notes after lectures;
- complete (a minimum of 5 out of 6) homework assignments;
- complete one mid-term examination; and
- 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 <a href="http://colorado.edu/policies/classbehavior.html">http://colorado.edu/policies/classbehavior.html</a>

for University of Colorado polices on student classroom and course-related behavior.

## **Grading**

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

Homework assignments	(5x10%)	50 %
Mid-term exam	(1x20%)	20 %
Final exam	(1x30%)	30 %

The mid-term and 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 may have their final exam weighted at 50 percent with the instructor's approval.

The final examination for ECON 3070 is scheduled for

Mon. Dec. 17	10:30 p.m 1:00 p.m.
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See http://registrar.colorado.edu/calendar/exam sched fall07.html.

## Important dates for assessment

September 12	Homework 1
September 28	Homework 2
October 12	Homework 3
October 19	Mid-term examination
November 2	Homework 4
November 16	Homework 5
December 7	Homework 6
December 17	Final examination

## Sample final

# **Solutions to Selected Assignments**

# **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. In this class, students should notify the instructor of anticipated conflicts during the first two weeks of the semester so that there is adequate time to make necessary arrangements. See full details at <a href="http://www.colorado.edu/policies/fac\_relig.html">http://www.colorado.edu/policies/fac\_relig.html</a>

## Honor code

The University has recently adopted a student Honor Code. Students should familiarize themselves with its tenets at <a href="http://www.colorado.edu/academics/honorcode/">http://www.colorado.edu/academics/honorcode/</a>. 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. Contact: 303-492-8671, Willard 322, and <a href="http://www.Colorado.EDU/disabilityservices">http://www.Colorado.EDU/disabilityservices</a>

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 <a href="http://www.colorado.edu/disabilityservices">http://www.colorado.edu/disabilityservices</a></a>

## **Tentative course outline**

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.

Week	Topic	Readings
1	Part I. Review Introduction, Analytical Tools	Ch. 1
2	Demand and Supply Analysis	Ch. 2
3	Part II. Consumer Theory Preferences and Utility	Ch. 3
4	Consumer Choice	Ch. 4
5	Consumer Demand and its Applications	Ch. 5 PP slides
6	Part III. Theory of the Firm Inputs and Production Functions	Ch. 6
7	Cost Minimization	Ch. 7
8	Exam review,  Midterm Examination	Ch. 1-7
9	Cost Curves Part IV. Perfect Competition Perfectly Competitive Markets	Ch.8. Notes on Returns to scale Ch. 9
10	Consumer and Producer Surplus, Applications: Analyzing Public Policy Interventions	Ch. 5, 9 Ch.10
11	Part V. Market Power, Market Structure, Pricing Monopoly	Ch.11
12	General Equilibrium, Efficiency, First Welfare Theorem	Ch. 16
13	Thanksgiving and Fall Break	

14	Price Discrimination	Ch. 12
15	Oligopoly, Game Theory	Ch. 13, 14
IIIA	Part VI. Topics in Public Policy Externalities	Ch. 17
17	Final Examination	Ch. 9-14, Ch. 16,17