INTERMEDIATE MICROECONOMICS (ECON 3070-006)
Department of Economics, University of Colorado
Fall 2010

M,W,F:	11:00-11:50 am,	Professor:	Charles de Bartolome
Room:	RAMY N1B23	Office:	ECON 203
Office hours:	M 2:15-3:15 pm; Tu 9:15-10:15am;	Tel #:	(303) 492-4464
	Fri 9:15 - 10:15 am.	e-mail:	debartol@colorado.edu

Textbook: Andrew Schotter, (2009), *Microeconomics*: *A Modern Approach*.
South-Western Cengage Learning.

Course description:

The course's primary goal is to prepare students with the basic tools used in the 4000-level courses. It presents the material by considering the different stages of economic development. The decisions by households of how hard to work, which goods to buy and how much to save are presented in an undeveloped economy. A firm is then posited to discover a production process and to become a monopoly: its pricing decisions are discussed. The monopoly's profits induce entry and the industry becomes an oligopoly. The interaction between the firms is used as a tool to present game theory. As more firms enter, the industry becomes competitive. The welfare consequence of the different industry structures are discussed.

Course Level:

The course builds on the material presented in the Introduction to Economics (ECON 1000) or the Principles of Microeconomics (ECON 2010), covering the material at a more advanced level. The basic relationships are developed graphically and using calculus.

Pre-requisites:

EITHER ECON 1000 (Introduction to Economics) OR Econ 2010 (Principles of Microeconomics);

AND

EITHER ECON 1078 and 1088, OR MATH 1071 and 1081, OR MATH 1071 and 1300, OR APPM 1350.

Course assignments and CULearn:

All course assignments, problem sets and some lecture notes are posted on CULearn at: https://cuconnect.colorado.edu

In the past, some students have had difficulty in downloading some of the posted pdf files. ITS advises that this is due to the large file sizes. ITS recommends that you open the Adobe Acrobat Reader. Then click as: Edit > Preferences> Internet and *un*check "Allow Fast Web View".

Please note that six pages of each Adobe Acrobat file can be printed on a single sheet by clicking as: Print >Properties > Multipage Printing > 6.

Problem Sets:

Problem sets with answers will be posted for each topic. The problem sets are an integral part of the course. They are designed to help you master the material.

In addition, there are many questions at the end of each chapter in the textbook. I particularly encourage you to do the questions listed on this syllabus - the answers are printed at the back of the textbook.

The exams will loosely follow the format of the problem sets.

Attendance at class:

Woody Allen once remarked: "90% of life is just turning up". The best way to learn the material is to attend class. Reading the lecture notes posted on the web is not a good substitute for attendance. Attendance at class is therefore required.

Grading:

There are two midterms, an experiment and a final exam. The student's grade (before any adjustment for non-attendance) will be determined as:
30% First Midterm, 30% Second Midterm, 10% Experiment and 30% Final.

Non-attendance at class will be reflected in your grade. Your final score - calculated as explained above under "Grading" - is out of 100 points. For each absence from class after your third absence, your score will be reduced by .5 point. For example, your score from the exams is 76 (out of 100) and in total you missed 6 classes. Your final score which I will use to calculate your grade is 76-3(.5) = 74.5.

Administrative Drop:

Because attendance is important and is expected, I will drop from the class any student who neither attends the first three classes of the term nor gets special permission from me for his/her absence.

Difference with other sections:

I expect this section to go slower, cover fewer topics and put more emphasis on analysis than other sections.

Exams: The two midterms and the final will be given as:

FIRST MIDTERM:	Monday 20 Sept in MUEN E0046	7:00 - 9:00 p.m.
SECOND MIDTERM:	Monday 25 Oct in MUEN E0046	7:00 - 9:00 p.m.
FINAL:	Tuesday 14 Dec in RAMY N1B23	7:30 -10:00 p.m.

You must bring a blue-book to each exam.

Because this is an intermediate class, the exams will not just repeat material covered in class. Some questions will closely follow the material covered in class and in the problem sets, but some will ask you to apply the material in a different environment.

Failure to be present at an exam:

If you fail to be present at an exam (unless you are ill and have a medical note from your doctor or unless, before the exam I have granted you permission to miss the exam), you will earn a score of 0 in the exam.

Classroom courtesy:

Please turn your cell 'phone off prior to the start of class.

I believe that learning is enhanced if there is full concentration by both the instructor and the student. Therefore, usage of laptop computers in class is restricted to following the course notes. To facilitate this, laptops may only be used in the front two rows of the classroom.

Students with Special Needs:

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 www.Colorado.EDU/disabilityservices .

Harassment Policy:

> The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships applies to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based on race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status 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, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at: http://www.colorado.edu/odh

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, please let me know in a timely manner if one of the exam dates falls on a religious holiday you intend to observe and I will arrange for you to take a make-up. See policy details at http://www.colorado.edu/policies/fac_relig.html

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 have 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. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences in race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Academic Integrity:

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 and at http://www.colorado.edu/academics/honorcode/

Course outline:

shown overleaf is a list of topics to be covered and likely dates.

Date	*Topic*	*Chapter*

1. INTRODUCTION

23, 25 Aug	INTRODUCTION	1
	Ten Big Ideas	
	Normative and positive economics.	
	Property Rights: the problem of the commons	

2. HOUSEHOLDS

27 Aug	HOUSEHOLDS: BUDGET SETS	2 (pp. 19-30.5)
	Sets	*omit*: pp. 25.7 - 27.5
	Economically possible set	
	Utility	

30 Aug,	HOUSEHOLDS: REPRESENTING TASTES	2 (pp. 30.5-39)
1, 3 Sept	Utility	*omit*: pp. 31.4 - 32.5
	- diminishing marginal utility	
	Indifference curves	3
	New welfare economics	*omit*: pp. 57 - 59
	Marginal Rate of Substitution	
	Convexity	

Problem Set 1: Consumer preferences
Textbook problems: Chapter 3, Q 1, 3, 4

8, 10, 13 Sept	HOUSEHOLDS: CHOICE AND MARKET QUANTITIES	4
	Individual consumer choice	*omit*: pp. 76-78.5
	Income expansion path	*omit*: pp. 84-90
	- normal and inferior goods.	
	Demand curves	
	Income and substitution effects	
	- normality and downward-sloping demand curves	
	Market demand	*also*: pp. 109-110

Problem Set 2: Consumer Choice
Textbook problems: Chapter 4, Q 2, 5

15, 17 Sept	APPLICATIONS OF HOUSEHOLD DEMAND Labor Supply Savings Supply	5 (pp. 93-104.4) *also*: pp 683.5 - 685

Problem Set 3:   Labor Supply and Savings Supply
Textbook problems: Chapter 5, Q 1

20 Sept	FIRST MIDTERM (7:00 - 9:00 p.m. in MUEN E0046)

22, 24, 27, 29 Sept	HOUSEHOLDS: VALUING MARKET ACTIVITY Benefit Marginal Benefit Consumer Surplus	5 (pp. 112.9-115.9, *and* 118.5-120.9)

Problem Set 4:   Net Benefit (Consumer Surplus)

3. FIRMS

1, 4, 6 Oct	FIRMS: PRODUCTION Production process and technology Production function - diminishing marginal returns - marginal product Isoquants Marginal rate of technical substitution Returns to scale Short-run and long-run production functions	8

Problem Set 5:   Production
Textbook problems: Chapter 8, Q 3, 8, 8

8 Oct	FIRMS: COSTS Cost functions Isocost curves Minimizing the cost of production - "marginal rate of technical substitution = factor price ratio" rule Input substitution	9

Textbook problems: Chapter 9, Q 1, 3

11Oct   FIRMS: COSTS (cont)   10
               Short-run and long-run
               Marginal cost functions
               Average cost functions.

               Problem Set 6:   Costs
               Textbook problems: Chapter 10, Q 1

               4. "MARKET" INTERACTIONS: HOUSEHOLDS AND FIRMS

13,15,18 Oct   STRATEGIC ANALYSIS: GAME THEORY   11
               Extensive form   *omit*: pp. 237.7 - 251,
               Information sets   *omit*: Appendix A
               Strategy   *omit*: Appendix B
               Normal form
               Nash Equilibrium
               Credible Threats
               Subgame Perfect Equilibrium
               Backward Induction

               Problem Set 7:   Game Theory
               Textbook problems: Chapter 11, Q 2, 6

20,22 Oct   "MARKET": MONOPOLY   17
               Marginal revenue curve   *omit*: pp. 391.8 - 403
               Maximizing profit   *omit:* Appendix B
               - "marginal revenue = marginal cost" rule
               Well-being created by monopoly
               Socially-optimal single price

               Problem Set 8:   Monopoly
               Textbook problems: Chapter 17, Q 4.

25 Oct   SECOND MIDTERM (7:00 - 9:00 p.m. in MUEN E0046)

27, 29 Oct   "MARKET": MONOPOLY: REGULATION   18
1, 3 Nov   Social inefficiency: deadweight loss   *omit:* pp. 429.4 - 432
               Natural Monopoly   *omit*: pp. 436.5 - 441

Sustainable Monopoly   *omit*: Appendix A
Average-cost pricing   *omit*: Appendix B
Rate of return regulation
Price-cap regulation

Problem Set 10:   Regulation
Textbook problems: Chapter 18, Q 2, 5

5,8,10 Nov   "MARKET": DUOPOLY   19
Cournot Quantity Model   *omit:* pp. 463.5 - 466.1
Welfare properties of duopolistic markets   *omit:* pp. 472.4 - 482.1
     omit: pp. 484.6 - 485.5
     omit: Appendix B

Textbook problems: Chapter 19, Q 1

12 Nov   "MARKET": OLIGOPOLY AND MARKET ENTRY   pp. 510 - 512. 5
Perfect competition as a sequence of successful entries

Problem Set 10:   Duopoly/Oligopoly

15, 17 Nov   "MARKET": PERFECTLY-COMPETITIVE MARKETS   14
IN SHORT-RUN   *omit*: pp. 334 - 336.7
Short-run supply of individual firm
Short-run Equilibrium

Textbook problems: Chapter 14, Q 2.

19, 29 Nov   "MARKET": PERFECTLY-COMPETITIVE MARKETS   15 (pp. 342-349.5)
IN LONG-RUN
Long-run equilibrium
Dynamic changes

Textbook problems: Chapter 15, Q 1, 2.

1 Dec   NORMATIVE PROPERTIES OF COMPETITIVE EQUILIBRIA   15 (pp. 349.5-355)
Why are long-run competitive equilibria so good?
First Fundamental Welfare Theorem
Second Fundamental Welfare Theorem

Problem Set 11:   Perfect Competition

3 Dec   FACTOR MARKETS   26
             Labor Market   *omit:* pp. 689-699.5
             Capital Market

             Textbook problems: Chapter 26, Q 3, 7 8.

5. COURSE SUMMARY: EXPERIMENT

6,8,10 Dec   EXPERIMENT

14 Dec   FINAL EXAM (7:30 - 10:00 pm in RAMY N1B23)