

INTERMEDIATE MICROECONOMICS (ECON 3070-005)
Department of Economics, University of Colorado
Spring, 2007

M,W,F:	10:00-10:50 am,	Professor:	Charles de Bartolome
Room:	ECON 117	Office:	ECON 203
Office hours:	M 3:45-4:45 pm, Tu 9:15-10:15 am, Th 1:30 - 2:30pm	Tel:	(303) 492-4464
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Textbook: Andrew Schotter, (2001), *Microeconomics: A Modern Approach* (3rd Edition). Addison Wesley Longman.

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.

Course Prerequisites:

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

AND

EITHER ECON 1078 and 1088, OR MATH 1300, OR MATH 1310, OR MATH 1081, OR MATH 1080, 1090 and 1100, OR APPM 1350.

Course assignments and CULearn: all course assignments, problem sets and some lecture notes are posted on CULearn at: <https://culearn.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 *uncheck* "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, and the exam will loosely follow the format of the problem sets.

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

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.

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 will be given in the evening as:

FIRST MIDTERM:	Monday 12 February in EDUC 220	7:00 - 9:00 p.m.
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SECOND MIDTERM:	Monday 19 March in EDUC 220	7:00 - 9:00 p.m.
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The final exam will be held as:

FINAL:	Monday 7 May in ECON 117	10:30 a.m. - 1:00 p.m.
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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.

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 .

Sexual 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.

<i>Date</i>	<i>Topic</i>	<i>Chapter</i>
1. INTRODUCTION		
17, 19 Jan	INTRODUCTION Ten Big Ideas Normative and positive economics. Property Rights: the problem of the commons	1
2. HOUSEHOLDS		
22,24,26,29 Jan	HOUSEHOLDS: REPRESENTING TASTES Sets Utility - diminishing marginal utility Indifference curves New welfare economics Marginal Rate of Substitution Convexity	2 <i>omit:</i> Sec 2.2 pp. 28.5-29.5 ("Continuity Assumption")
31 Jan, 2, 5, 7 Feb	HOUSEHOLDS: CHOICE AND MARKET QUANTITIES Individual consumer choice Income expansion path - normal and inferior goods. Demand curves Income and substitution effects - normality and downward-sloping demand curves Market demand Consumer surplus CONSUMER CHOICE (Cont) LABOR SUPPLY SAVING SUPPLY	3 <i>omit:</i> Sec 3.8, 3.12, 3.15, pp. 103.5-104 Sec 3.18, pp. 113- 116.5, pp. 118 Sec 3.21 Appendix B Appendix C pp. 88-89 pp. 70-708
9 Feb	ALGEBRA OF THE CHOICE PROBLEM	pp. 121-122
12 Feb	FIRST MIDTERM (7:00 - 9:00 p.m. in EDUC 220)	

12, 14, 16 Feb	HOUSEHOLDS: VALUING MARKET ACTIVITY	3
	Benefit	
	Marginal Benefit	
	Consumer Surplus	
3. FIRMS		
19, 21, 23 Feb	FIRMS: PRODUCTION	5
	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	
26, 28 Feb 2 Mar	FIRMS: COSTS	6
	Cost functions	
	Isocost curves	
	Minimizing the cost of production	
	- “marginal rate of technical substitution = factor price ratio” rule	
	Input substitution	
	Short-run and long-run	
	Marginal cost functions	
	Average cost functions.	
4. “MARKET” INTERACTIONS: HOUSEHOLDS AND FIRMS		
5, 7, 9 Mar	STRATEGIC ANALYSIS: GAME THEORY	7
	Extensive form	<i>omit:</i> pp. 242-260,
	Information sets	Sec 7.5
	Strategy	Appendix A
	Normal form	Appendix B
	Nash Equilibrium	
	Credible Threats	
	Subgame Perfect Equilibrium	
	Backward Induction	
12,14,16 19 Mar	MONOPOLY	9
	Marginal revenue curve	<i>omit:</i> Sec 9.4
	Maximizing profit	Appendix B

- “marginal revenue = marginal cost” rule
 Social inefficiency: deadweight loss
 Socially optimal single price

19 Mar	SECOND MIDTERM (7:00 - 9:00 p.m. in EDUC 220)	
21, 23 Mar	MONOPOLY: REGULATION Natural Monopoly Sustainable Monopoly Average Cost Pricing	10 <i>omit:</i> pp384-386 Sec 10.4 Appendix A Appendix B
2, 4, 6, 9 Apr	DUOPOLY Cournot Quantity Model Welfare properties of duopolistic markets	11 <i>omit:</i> Sec 11.3 Sec 11.5 Sec 11.6 Sec 11.7 Sec 11.8 p. 443 Appendix B
11 Apr	OLIGOPOLY AND MARKET ENTRY Perfect competition as a sequence of successful entries	Sec 12.5
13, 16, 18, 20 23 Apr	PERFECTLY-COMPETITIVE MARKETS Short-run supply of individual firm Equilibrium Long-run equilibrium Dynamic changes Why are long-run competitive equilibria so good? First Fundamental Welfare Theorem Second Fundamental Welfare Theorem	13 <i>omit:</i> (pp. 512-517) 15
25 Apr	FACTOR MARKETS Labor Market Capital Market <i>If time permits:</i> Motivating labor (Sec 8.1, 8.2, 8.3)	19 <i>omit:</i> Sec 19.6 Sec 19.7
27 Apr	No class	

5. COURSE SUMMARY: EXPERIMENT

30 Apr 2, 4 May	EXPERIMENT
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7 May

FINAL EXAM (10:30 a.m. - 1:00 p.m. in ECON 117)