

University of Colorado - Department of Economics
Intermediate Microeconomic Theory
ECON 3070-020
Spring 2017

| | Instructor | Teaching Assistant |
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| Office: | Economics 313 | Economics 309B |
| Office Hours: | W 10:00-11:30, F 1:00-2:30, & by appointment | M 4:00-5:00, W 9:00-11:00, & W 2:00-3:00 |

Meeting Times:

| Section | Day | Time | Location |
|----------------|------------|-------------|-----------------|
| Lecture | MWF | 12:00-12:50 | ECON 117 |
| Recitation 021 | M | 2:00-2:50 | CLRE 302 |
| Recitation 022 | W | 4:00-4:50 | HLMS 245 |

Recitation starts the 2nd week of class (week of January 23)

Course Description: Microeconomics is the study of how economic agents make decisions in the presence of constraints. This course will extend the concepts first learned in Principles of Microeconomics by introducing a theoretical framework to analyze the decisions of consumers, workers, and firms. The course is divided into four sections. We begin the course with Consumer Theory in Section 1. Here, we build a model of consumer choice and use this model to construct individual demand and market demand. In Section 2, we turn our attention to firm behavior and market supply. We build a model to show what technology a firm uses in production and what quantity of this product to sell in the market. The model is used to derive the firm's supply curve and the market supply curve. Section 3 brings together consumer and producer theory to understand how price and quantity are determined in the market equilibrium. Section 4 explores deviations from the assumption of perfectly competitive markets - monopoly power and imperfect competition.

Prerequisites: This course has two sets of prerequisites - (i) Economics and (ii) Mathematics - to ensure proper preparation. Both prerequisites need to be met for enrollment in the course.

- (i) Introduction to Economics (ECON 1000) OR Principles of Microeconomics (ECON 2010)
- (ii) Math Tools for Economists I and II (ECON 1078 and ECON 1088) OR Calculus I (MATH 1300 or equivalent course)

Textbook: The required textbook is *Microeconomics: An Integrated Approach*, 5th edition, by David Besanko and Ronald R. Braeutigam, 2013, John Wiley & Sons, New York, ISBN 9781118572276. Earlier editions of the text are acceptable.

Grading:

| | |
|----------------|-----|
| Problem Sets | 15% |
| Quizzes | 10% |
| Midterm Exam 1 | 20% |
| Midterm Exam 2 | 20% |
| Final Exam | 35% |

Problem Sets: The schedule of when problem sets are due is given below. Problem sets will be due on the Fridays listed on the course schedule. The problem sets must be handed in at the beginning of Friday's class the week they are due. Late or missing problem sets will receive a score of zero. Solutions will be posted soon after the due date. Work can be completed in groups. However, handing in identical homework is not permitted and will result in a zero for all people with identical homework.

Quizzes: Throughout the semester, quizzes will be administered in both recitation and lecture without advanced notification. Quizzes will be short - 10-15 minutes - and will provide additional practice on the types of questions covered in the problem sets. Quizzes will be completed individually, but will allow for the use of notes and your textbook. Make-up quizzes will not be given, but I will drop the two lowest quiz grades. There is no need to email me or the TA to let us know you will be absent or why. If you miss class, it is your responsibility to catch-up on the missed material from the lecture/recitation.

Exams: The first midterm (**February 17**) will cover chapters 1-5. The second midterm (**April 7**) will cover chapters 6-9. The final exam (**May 10**) will be cumulative, but will focus more heavily on material from chapters 10-14. You may not miss an exam. No makeup exams will be given. If you fail to be present at an exam, you will earn a score of 0 in the exam. If there is a proven emergency or other unusual circumstance, your exam grades will be re-weighted toward your final exam. Additionally, no cell phone or graphing calculators are permitted for exams. Please bring a basic calculator or be prepared to do calculations with pen/pencil and paper.

If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternative exam time for the last exam or exams scheduled on that day. Also, if you have two final exams scheduled to meet at the same time you are entitled to arrange an alternative examination time for the later course. To qualify for rescheduling final exam times, you must provide evidence that you have three or more exams on the same day or two exams meeting at the same time, and arrangements must be made with your instructor no later than the late drop deadline.

How to Be Successful

Office Hours: Office hours are for your benefit. They provide an excellent opportunity to get individual or small group help in clarifying concepts from the course. Office hours will be most helpful if you have read the textbook and attempted practice problems. We can be most helpful when you come in with specific questions that are causing you difficulties. If you are unable to attend regularly scheduled office hours, don't hesitate to email me to arrange a different time to meet.

E-Mail: Please use email wisely. I will try to respond to emails within 24 hours. Sometimes, I may suggest that you come by office hours if the answer to your email would be difficult to fully explain over email. If the answer would be useful to the entire class, I will take time in lecture to answer the question. Additionally, please do not ask questions over email when the answer can be found within the syllabus (e.g., "When is the midterm?" or "Where is your office?").

Extra Help: Do not hesitate to come by our office hours for additional help or clarification. Additionally, the Economics department provides a free drop-in tutor lab. I will provide this schedule to the class on D2L when it becomes available. You may also want to hire a private tutor (for a fee). The list of private tutors is provided on the department website. When this list becomes available, I will post a link on D2L.

Important Dates: One way to be successful is being aware of important dates. The following are the dates of the exams. See the tentative course schedule for when problem sets will be due.

| Exam | Date |
|-------------|-------------------------------|
| Midterm 1 | February 17 |
| Midterm 2 | April 7 |
| Final Exam | Wednesday, May 10 4:30-7:00pm |

Additional Tips:

- (i) Read the textbook chapter before class - I have provided the corresponding chapters on the course schedule. It will be easier to follow lecture and improve your recollection if you have a sense of the material that will be covered in lecture.
- (ii) Look over the textbook chapter (again) after class - This will help the concepts sink in and help you see what topics still seem difficult. Bring questions on these difficult topics to office hours.
- (iii) Do not try to complete the problem the day they are due. You might find it particularly helpful to complete the questions on the problem sets as they are covered in lecture.
- (iv) Do not skip class - it amazes me how many students fail to come to class and show up confused on the exam. It is easy to get behind and new topics will be built on topics learned earlier.
- (v) Do ask many questions in lecture, recitation, and office hours.

Tentative Course Schedule: The following course outline is subject to change throughout the semester. The timing of subjects and problem set due dates may vary depending on the pace of the course. However, I will not adjust exam dates except for unforeseen University closures on exam day.

| Week | Dates | Topic | Reading | Assignments Due |
|------|----------------------|--|------------------|------------------------|
| 1 | 1/18 1/20 | Analyzing Economic Problems Mathematic Preliminaries | Ch. 1 A.1-A.7 | |
| 2 | 1/23 1/25-1/27 | Demand and Supply Analysis Preferences and Utility | Ch. 2 Ch. 3 | PS1 - Ch. 1-2 (1/27) |
| 3 | 1/30 2/1-2/3 | Preferences and Utility Consumer Choice | Ch. 4 | PS2 - Ch. 3 (2/3) |
| 4 | 2/6 2/8-2/10 | Consumer Choice Theory of Demand | Ch. 5 | PS3 - Ch. 4 (2/10) |
| 5 | 2/13 2/15 2/17 | Theory of Demand Midterm 1 Review MIDTERM EXAM 1 | Ch. 1-5 | |
| 6 | 2/20-2/24 | Inputs and Production Functions | Ch. 6 | |
| 7 | 2/27-3/3 | Inputs and Production Functions | | |
| 8 | 3/6-3/10 | Costs and Cost Minimization | Ch. 7 | PS4 - Ch. 6 (3/10) |
| 9 | 3/13-3/17 | Cost Curves | Ch. 8 | PS5 - Ch. 7 (3/17) |
| 10 | 3/20 3/22-3/24 | Cost Curves Perfectly Competitive Markets | Ch. 9 | PS6 - Ch. 8 (3/24) |
| | 3/27-3/31 | No class, Spring Break | | |
| 11 | 4/3 4/5 4/7 | Perfectly Competitive Markets Midterm 2 Review MIDTERM EXAM 2 | Ch. 6-9 | |
| 12 | 4/10-4/12 4/14 | Competitive Market Applications Monopoly | Ch. 10 Ch. 11 | |
| 13 | 4/17 4/19-4/21 | Monopoly Capturing Surplus | Ch. 12 | PS7 - Ch. 10-11 (4/21) |
| 14 | 4/24-4/26 4/28 | Game Theory Market Structure and Competition | Ch. 14 Ch. 13 | PS8 - Ch. 12&14 (4/28) |
| 15 | 5/1-5/3 5/5 | Market Structure and Competition Final Exam Review | | PS9 - Ch. 13 (5/5) |
| | 5/10 | FINAL EXAM - 4:30-7:00pm | Ch. 1-14 | |

University Policies

Disability Policy: If you qualify for accommodations because of a disability, please submit a letter from Disability Services to me in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Additional information can be found at <http://www.colorado.edu/disabilityservices>

Religious Observance Policy: Campus policy regarding religious observances requires that faculty make every effort reasonably and fairly to accommodate all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or other required attendance. If you have a conflict, please contact me at the beginning of the semester so we can make proper arrangements.

Code of Behavior Policy: 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 have 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. Class rosters are provided to the instructor with the students 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 the appropriate changes to my records.

Honor Code: 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). The student honor code policy can be read in its entirety at <http://www.colorado.edu/policies/student-honor-code-policy>. Other information from the Honor Code Office can be found at <http://honorcode.colorado.edu>

Discrimination and Harassment Policy: The University of Colorado at Boulder policies on Discrimination and Harassment, Sexual Misconduct, and 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 upon 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 and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>