ECON 3070-020: Intermediate Microeconomic Theory Spring 2025

Instructor: Professor Yongmin Chen

Office: Econ 108

Class Time and Location: MW 5:05-6:20 PM; ECON 117

Office Hours: MW 1:30-3:00 PM

Course Description: Microeconomics studies the behavior of individual economic agents and their interactions. This course consists of four parts. Part 1 introduces the basics of microeconomic analysis and serves as a quick review of some basic economic concepts. Part 2 studies consumer behavior and market demand. We will examine how a consumer may make optimal choices, how individual demands are formed, and how market demand can be derived. Part 3 discusses the firm's technologies, production functions and production costs. We shall see how firms can make the optimal input choices to minimize production costs. This lays the foundation for the study of firm behavior under different forms of market structure. Part 4 integrates the previous materials into models of prices and outputs. We will also cover topics in game theory and business strategies, as well as discuss economic efficiency and public policy issues.

Prerequisites:

Economics Prerequisites: ECON 2010

Mathematics Prerequisites: Either the combination (ECON 1078 AND ECON 1088) or MATH

1081 or the combination (MATH 1080, MATH 1090 and MATH 1100)

<u>Course Material</u>: The textbook is *Microeconomics*, *5th or* 6th *edition*, by David Besanko and Ronald Braeutigam, published by John Wiley & Sons, Inc. The required readings are indicated below.

<u>Homework assignments</u> are very important for you to review concepts and solve problems. **You must complete each homework before the next topic starts.** Homework assignments will not be collected/graded, but homework quizzes during recitations will be graded. Each homework quiz will be based on the most recent one or two completed homework assignments.

<u>Grading</u>: Grades are based on in-class quizzes (15%), homework quizzes (15%), midterm exam 1 (20%), midterm exam 2 (20%), and the final exam (30%). No makeup exams will be given. If there is a proven emergency situation that causes you to miss an exam, your grade for your missed exam will be filled in by reweighing future exams (e.g., if you miss the second exam, I will reweigh the final).

There will be about 8 in-class quizzes, each of which will be based on the material from the current or previous class. There will be about 6-8 homework quizzes during recitations (to be determined by the TA). The lowest score for in-class quizzes and the lowest score for homework quizzes will be dropped in computing grades.

Attendance: Class attendance is mandatory. A student will be dropped administratively if he/she does not attend at least three classes during the first two weeks of the semester.

How to Study effectively: I suggest that you **read the assigned materials before each lecture**, so that you are prepared. Take notes during the lecture. After each class, **have a quick review within the same or next day**. Complete each homework on time. Try to get all the questions for each class and each topic answered without delay.

Course Schedule:

The course is arranged by topics, and each topic is usually covered over multiple lectures. Below is a tentative course schedule. There may be changes to this schedule during the semester, which will be announced in class. It is your responsibility to update course information according to the announcements made in class.

<u>Topics</u>	Readings
1. Introduction to Microeconomic Analysis Lectures 1, 2 HW 1: pp. 21-22: #1.2, 1.9; pp. 70-73: #2.1, 2.3, 2.8, 2.15, 2.16.	Ch 1; Ch 2.
2. Consumer Preferences and Utility	Ch 3.
Lectures 3, 4	
HW 2: pp. 102-104: #3.10, 3.13, 3.15, 3.16, 3.17, 3.18, 3.21.	
3. Consumer Choice	Ch 4.
Lecture 5	
HW 3: pp. 140-145: #4.1, 4.3, 4.5, 4.6, 4.8, 4.9, 4.18.	
4. Individual and Market Demands Lectures 6, 7, 8. HW 4: pp. 200-203: #5.6, 5.7, 5.12, 5.18, 5.19, 5.23, 5.24.	Ch 5
11 w 4. pp. 200-203. m3.0, 3.7, 3.12, 3.10, 3.17, 3.23, 3.24.	

EXAM 1 (Week 5): Wednesday, 2/12, at normal class time.

5. Inputs and Production

Ch 6.

Lectures 9, 10

HW 5: pp. 243-247: #6.2, 6.5, 6.9, 6.12, 6.13, 6.15, 6.17, 6.19, 6.20.

6. The Cost of Production

Ch 7. Ch. 8

Lectures 11, 12

HW 6: pp. 281-284: #7.1, 7.4, 7.5, 7.9, 7.20; pp. 323-326: 8.5, 8.6.

7. Perfectly Competitive Markets

Ch 9, Ch 10

Lectures 13, 14, 15

HW 7: pp. 382-387: #9.1, 9.6, 9.7, 9.9, 9.11, 9.15, 9.18;

pp. 436-438: #10.1, 10.4, 10.7, 10.9

8. Monopoly

Ch 11 (442-478), Ch 12

Lectures 16, 17, 18; Lecture 18 will be given after Exam 2

HW 8: pp. 485-488: #11.1, 11.2, 11.3, 11.5, 11.6, 11.10, 11.13;

pp. 527-529: #12.1, 12.2, 12.3, 12.4, 12.10

EXAM 2 (Week 10): Wednesday, 3/19, at normal class time.

Spring Break: Week 11 (3/24-28)

9. Market Structure and Competition

Ch. 13

Lectures 19, 20

HW 9: pp. 568: #13.2, 13.4, 13.5.

10. Game Theory and Strategic Behavior

Ch. 14

Lectures 21, 22, 23

HW 10: pp. 601-606: #14.1, 14.2, 14.3, 14.4, 14.5, 14.11, 14.12.

11. Decisions under uncertainty

Ch. 15

Lectures 24-25

Week 16: Review for the final exam

FINAL EXAM: Indicated on the Canvas page.

University Policies

Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation, or political philosophy.

For more information, see the <u>classroom behavior policy</u>, the <u>Student Code of Conduct</u>, and the Office of Institutional Equity and Compliance.

Requirements for Infectious Disease

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all applicable campus policies and public health guidelines to reduce the risk of spreading infectious diseases. If public health conditions require, the university may also invoke related requirements for student conduct and disability accommodation that will apply to this class.

If you feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the guidance of the Centers for Disease Control and Prevention (CDC) for isolation and testing. If you have been in close contact with someone who has COVID-19 but do not have any symptoms and have not tested positive for COVID-19, you do not need to stay home but should follow the guidance of the CDC for masking and testing. Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation. If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions on the Disability Services website.

If you have a required medical isolation for which you require adjustment, please notify me and the TA ASAP to allow the for proper arrangements.

Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: honor@colorado.edu, 303-492-5550. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits <u>protected-class</u> discrimination and harassment, sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who have been subjected to misconduct can contact OIEC at 303-492-2127 or email <u>cureport@colorado.edu</u>. Information about university policies, <u>reporting options</u>, and <u>support resources</u> can be found on the <u>OIEC website</u>.

Please know that faculty and graduate instructors must inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive outreach from OIEC about resolution options and

support resources. To learn more about reporting and support for a variety of concerns, visit the **Don't Ignore It** page.

Religious Accommodations

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in the first two weeks of the semester. See the campus policy regarding religious observances for full details.

Mental Health and Wellness

The University of Colorado Boulder is committed to the well-being of all students. If you are struggling with personal stressors, mental health or substance use concerns that are impacting academic or daily life, please contact <u>Counseling and Psychiatric Services (CAPS)</u> located in C4C or call (303) 492-2277, 24/7.

Free and unlimited telehealth is also available through <u>Academic Live Care</u>. The <u>Academic Live Care</u> site also provides information about additional wellness services on campus that are available to students.

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