UNIVERSITY OF COLORADO

Department of Economics Economics 3070 – Section 50 Intermediate Microeconomic Theory

Spring 2022

Professor: Tania Barham **Office:** Economics 114

Email: tania.barham@colorado.edu

Lectures: 12:30 -1:45am: in-person MUEN E113

On-line Join URL: https://cuboulder.zoom.us/j/92009637205

(password:GoBuffs)

Office Hours: ECON 114 TU/Th 10:50-12:00, 1:45-2:30

-In-person class / in-person office hours.

-On-line when class on-line: https://cuboulder.zoom.us/j/96245279688

- No password

Course Website: Canvas **Teaching Assistant:** TBD

Course Description

This course introduces the theoretical framework for analyzing the economic behavior of individual decision-makers, such as consumers, workers, firms. The course is divided into six sections. We begin with a basic review of supply and demand in Section 1. We then proceed to Section 2, which covers consumer behavior and market demand. In this section, we build a model of consumer choice and use this model to derive individual demand and market demand. In Section 3, we turn our attention to the other side of the market and analyze the behavior of firms and market supply. We build a model to show how each firm decides what technology it should use to make its product and what quantity of this product to bring to market. This model is then used to derive the firm's supply curve and the market supply curve. Section 4 brings the two sides of the market together to show how price and output are determined by the market. In Section 5 we examine efficiency and equity of the model and see how some common policy tools, such as taxes, can modelled. Finally, we examine a variety of market structures, the primary ones examined include, perfect competition and monopoly. If time permits, we will close the semester by examining some issues such as behavioral economics or public policy.

Class Format

This is an <u>in-person</u> class and will be taught in person except for instance when CU Boulder designates that in-person classes must be taught on-line. When classes go on-line, they will be taught synchronously (i.e. at the regular class time), at the zoom link above. When on-line, students must have their video on for the duration of the class period. I will decided in the first few classes if you must also have your mic on. Note CU has already designated classes to be online Jan. 10-21.

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.

Textbook

The required textbook is *Microeconomics* (edition 4, 5 or 6) by David Besanko and Ronald R. Braeutigam, 2013, John Wiley & Sons, New York, ISBN 978-1-11857227-6. There is a study guide available to accompany the textbook. You may wish to purchase the study guide if you would like extra practice solving problems, but doing so is not required. Lectures are based on the textbook and it is an important resource for learning material, especially if you miss a class. Please note that how to do optimization problems is taught in the class and it is important you attend class and follow the methods taught in class.

Clickers

We will be using iclickers. This class will start online so we will use the cloud for clickers while online. When class is in person you can use physical clickers. You do need to set up an iclicker account with your <u>CU email</u>. If you have any problems with your clickers call OIT at 5HELP. Remember that using someone else's clicker for them violates the honor code, so don't do it and don't ask someone to use your clicker if you are going to be absent from class.

Course Requirements

Participation and Attendance

Please note attendance for two of the first three classes in mandatory. Your participation and attendance grades will be based on random attendance checks and clicker data throughout the semester and your participation during the class. If the class is on-line, you must have your video on to be counted as present. I may also give unannounced quizzes. Sections with your TA are also mandatory. I allow you to be absent for 4 classes before an absence affects your participation grade. You may miss 2 sections before it affects your grade. There is no need to email me to let me know you will be absent or why, unless you are very sick and will be out for than two weeks. If this is the case, you should contact me to determine how your absence will be addressed. Your attendance grade is made of up of the percent of classes you are marked present for which attendance is taken and a participation grade that I assign based on your in-class participation. If you miss a class, it is the student's responsibility to catch-up on any missed material from other students in the class.

Grading

There will be 8 homework assignments, two mid-term examinations and one final exam. The weighting for these assessments are:

Assignments 15%

Participation/Attendance 15% (attendance in lectures and section)

Midterm Exam 120%Midterm Exam 225%Final Exam25%

Assignments

The schedule of when problem sets are due is below. Problem sets are essential practice for the exam. Problem sets will be posted on-line about a week prior to when they are due. They are due at midnight on the day they are due. Late problem sets will receive a score of zero. The two assignments with the lowest scores will be dropped and not count towards your grade. Because of this policy, I don't give exceptions and accept late homework. I recommend you do all the homeworks as the exams are structured somewhat similarly to homework questions.

Students can work on the problem sets in small groups (4 people or less). However, each person *must* submit their own write-ups of their problem sets *and* you must put the names of your group members on your assignment (make sure your name is distinct from the group members, so I know who to give the grade to). Handing in identical homework is not permitted and will result in a zero for all people with identical homework. Homeworks for which any answer is identical to a solution key from past years will receive a grade of 0, even if just one of the questions on the homework was copied.

Each assignment will be graded on a scale from 0 to 3: 0 points for not handing it in, 1 point for poor performance, 2 points for average performance, and 3 points for outstanding performance.

Exams

There are two midterms and a final in this course. No makeup exams will be given. If there is a proven emergency or other unusual circumstance and you miss an exam, your grade for your miss exam will be filled in by reweighting future exams (e.g. if you miss the second exam I will reweight the final).

Tutors

It is best to come to office hours to get help from myself or the TA when you need it. Please don't be shy. If you feel you need a tutor here are two resources to help you find someone.

- The Economics Department provides a free drop-in tutorial office which offers assistance on all course courses in the major, and occasionally on other undergraduate courses in the Department. Its website is https://www.colorado.edu/economics/node/513/attachment.
- ➤ The Economics Department maintains a list of tutors who are available for private hire. Its website is https://www.colorado.edu/economics/node/515/attachment.

Tentative Course Schedule

Please note due dates are subject to change. Changes are almost always to a later date

WEEK	TOPIC	READINGS	ASSIGNMENTS DUE (Day of Week Due)
W1: Jan 10	Analyzing Economic Problems	Ch 1	
	Math Review	A.1-A.7	
W2: Jan 17	Supply and Demand Analysis	Ch 2	PS 0 Math Review (W)
	Preferences and Utility	Ch 3	` ,
W3: Jan 24	Preferences and Utility	Ch 3	PS 1 – Ch 1-2 (W)
	Consumer Choice	Ch 4	
W4: Jan 31	Consumer Choice	Ch 4	PS 2 - Ch 3 (W)
	The Theory of Demand	Ch 5	
W5: Feb 7	The Theory of Demand	Ch 5	PS 3 – Ch 4 (W)
	The Theory of Demand	Ch 5	,
W6: Feb 14	Inputs and Production Functions	Ch 6	PS 4 – Ch 5 (W)
	Inputs and Production Functions	Ch 6	` ,
W7: Feb 21	Midterm Exam 1 (Ch 1-5)	Th Feb 24	
	Inputs and Production Functions	Ch 6	
W8: Feb 28	Inputs and Production Functions	Ch 6	
	Costs and Cost Minimization	Ch 7	
W9: Mar 7	Costs and Cost Minimization	Ch 7	PS 5 Ch 6 (W)
	Cost Curves	Ch 8	
W10: Mar 14	Cost Curves	Ch 8	PS 6 - Ch 7/8 <u>(F)</u>
	Perfectly Competitive Markets	Ch 9	
	MARCH BREAK -	ENJOY!	
W11: Mar 28	Perfectly Competitive Markets	Ch 9	
	Perfectly Competitive Markets	Ch 9	
W12: Apr 4	Competitive Markets: Applications	Ch 10	PS 7 - Ch 9 (W)
W13: Apr 11	Midterm 2 Exam (Ch 1-9)	TU Apr 12	
	Efficiency of Competitive Mrkt	Ch 16.4	
W14: Apr 18	Market Structure	Ch 13.1	PS 8 - Ch 10-16 (W)
	Monopoly and Monopsony	Ch 11	
W15: Apr 25	Tu: Behavioral Economics		
	Th: Office Hours		
	THE CITY II WILL		
	Final Exam Covers A.	II Chantars	
Tentative Final	Exam Schedule: please double che		lf.
Sat Apr 30th 1:30	0-4pm		

University Policies

CLASSROOM BEHAVIOR

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail 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 policies on <u>classroom behavior</u> and the <u>Student Conduct & Conflict Resolution policies</u>.

REQUIREMENTS FOR COVID-19

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. Students who fail to adhere to these requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct Conduct and Conflict Resolution. For more information, see the policy on classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the "Accommodation for Disabilities" statement on this syllabus.

CU Boulder currently requires masks in classrooms and laboratories regardless of vaccination status. This requirement is a precaution to supplement CU Boulder's COVID-19 vaccine requirement. Exemptions include individuals who cannot medically tolerate a face covering, as well as those who are hearing-impaired or otherwise disabled or who are communicating with someone who is hearing-impaired or otherwise disabled and where the ability to see the mouth is essential to communication. If you qualify for a mask-related accommodation, please follow the steps in the "Accommodation for Disabilities" statement on this syllabus. In addition, vaccinated instructional faculty who are engaged in an indoor instructional activity and are separated by at least 6 feet from the nearest person are exempt from wearing masks if they so choose.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further guidance of the Public Health
Office(contacttracing@colorado.edu). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should selfmonitor for symptoms and follow the further guidance of the Public Health
Office (contacttracing@colorado.edu).

Quarantine and Contact Tracing: Here is the information on quarantining and contract tracing https://www.colorado.edu/health/public-health/quarantine-and-isolation. If you have symptoms, think you have come in close contact with some with COVID-19, have tested positive for COVID-19, or are not sure if you need quarantine or what to do, contact, contact tracing at contacttracing@colorado.edu or 303-735-0017. If you disclose to me that you have potential symptoms, have tested positive for COVID-19, or have come in close contact with someone with COVID-19 then I need to submit that information to contact tracing.

ACCOMMODATIONS FOR DISABILITIES

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to me by *Jan 27th* 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 <u>Disability Services</u> website. Contact Disability Services at 303-492-8671 or <u>dsinfo@colorado.edu</u> for further assistance. If you have a temporary medical condition, see <u>Temporary Medical Conditions</u> on the Disability Services website.

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 academic integrity policy. Violations of the Honor Code may include, but are not limited to: plagiarism, 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 the Honor Code (honor@colorado.edu); 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the Honor Code website.

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. The university will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by or against members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or email cureport@colorado.edu. Information about university policies, <a href="mailto:reporting.eporti

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about their rights, support resources, and reporting options. To learn more about reporting and support options for a variety of concerns, visit <u>Don't Ignore It</u>.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance.

See the <u>campus policy regarding religious observances</u> for full details.