### ECONOMICS 3070 Intermediate Microeconomic Theory Spring 2025

#### **Instructor:** Dr. Billy Mertens

Office: Econ 12 and Zoom: <u>https://cuboulder.zoom.us/j/5838330659</u> E-mail:<u>mertens@colorado.edu</u>

Email is by far the best way to contact me. I check my email and respond (if time) two times every weekday. Once in the morning (typically between 8:30 and 9am, but sometimes earlier). There is typically not enough time to respond to all emails during that time, so I try to respond in the afternoon. I typically do not check emails at other times or over the weekend, but there are some exceptions such as exam times. We can set up times to meet on Zoom if you give me plenty (2 weeks) of advance notice.

Web: <u>canvas.colorado.edu</u>

**Office Hours:** T 10:50 – 12:50pm (Econ 12), and by appointment (on Zoom)

# **Course Description:**

The subject matter for intermediate microeconomic theory is the basis for almost everything economists do. The course is concerned with the behavior of individual economic agents and their interactions. It is aimed at helping you understand how individual economic agents make decisions and how markets work.

The issues we discuss are complex, but they do lend themselves extremely well to critical thinking and rational inquiry, which are the guiding principles of this course. Our goal is to become and remain informed about issues related to economics and, even more importantly, acquire the ability to think about complex issues in a logical objective manner. Thinking critically is what permits us to differentiate between the illogical and the sensible, between the misleading use of statistics, misleading anecdotal evidence, and the reasonable presentation of information.

As well as covering the material in the text, we might discuss a few current issues and how they relate to the economy, or simply some other basic micro material that isn't thoroughly discusses in the book. I will post some notes on the course website, and it is important for you to review these after class, and book assignments before class, as we will cover questions and problems on that material during class.

The course is divided into three parts. The first deals with theories of consumer behavior and demand. We will show how a consumer may make optimal choices, how individual demands are formed, and how market demands can be derived. Part two discusses the firm's technologies and production. This lays the foundation for the study of firm behavior under different forms of market structure. The third part of the course integrates the previous material into models of prices and outputs under different market structures. A variety of market structures are examined including perfect competition, monopoly, and oligopoly. If time permits, we will close the semester with an introduction to game theory and the economics of information.

### **Prerequisites:**

The prerequisites for this course are: Economics Prerequisites: ECON 2010 Mathematics Prerequisites: ECON 1078 & 1088 or MATH 1300 or MATH 1310 or MATH 1081 or MATH 1080, 1090 and 1100, or equivalent.

It is NOT sufficient to take these courses concurrently. I assume that you did not only take the class, <u>but also that you **understand and remember the content**</u>. The prerequisites must be strictly enforced.

The models covered in this course require basic calculus. It will be assumed that every student has a working knowledge of calculus, and there will be large no formal review of calculus techniques. As such, the mathematics prerequisites will be strictly enforced. I recommend that people that have only taken business calc take another calculus class before this course.

### **Policy on Cheating:**

If you are suspected of cheating, I will immediately <u>and without notification</u> forward your case to the honor code office. This is actually the fairest way to proceed. In these instances, if I took it upon myself to make the decision of whether you violated the honor code, there could be bias involved. The honor code council has both students and faculty members, and they are trained to deal with these types of situations. I will accept the honor code decision as final. If the honor code finds that you did not violate the code, then there will be no repercussions, and all grades will be entered based on your submitted work. <u>If you are found to have violated the honor code (see below), by both the honor code council and I, you will automatically fail the course!</u>

# AI:

You are welcome to use any form of AI to assist you in work outside of class. You may **not** use it in class – obviously not on exams, but also not during group assignments. I recommend that you not rely on AI for solving review set problems, or other problems your TA or I might assign because you will need to learn how to solve them on your own for exams.

**Material from a Missed Lecture:** If you miss a class, *you are responsible* for obtaining notes from a classmate and reading the relevant material in the articles. I encourage you to come to my office hours to discuss the material you missed, but only after you have reviewed the relevant material and prepared specific questions.

# **Class format**

This class will be slightly different from many of your usual classes. Some terms for our class format might be "relatively learner-centered" or "semi-rotated". Research on learning supports the use of these systems, and if I were to ignore them, I would be utilizing outdated and even defective teaching methods. For example, current research demonstrates that repetition helps strengthen neuronetworks and thus, increases long-term learning. Frequent problem solving, reviews and cumulative exams are all effective methods of beneficial repetition. Other research-backed effective systems are outlined below.

### Textbook:

The required textbook is *Microeconomics*, by David Besanko and Ronald R. Braeutigam (4<sup>th</sup> or later edition). 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.

# A Note on Learning Systems and Assessments

Please note that all exams will be semi-cumulative, and we will spend at least a little time reviewing for each exam and even more time going over the exams (with videos on Zoom). A little more detail on learning systems is given below:

# Learning systems:

- 1. Lecturing: explaining difficult material not easily learned on your own with text, groups, etc.
- 2. Exams: exams should be learning tools as well as assessment tools! We will go over each exam in depth in class. Reviewing exams is one area where in-class discussion and explanation are most effective.
- 3. Group scholarship: we will work some practice problems in groups, which can help your understanding of the material whether you already understand it well or are struggling a bit. The Group-Assignment dates are listed in the course outline do **not** miss these days!
- 4. Self-study: reading the articles, reviewing your notes, and solving problems.

# Assessment systems:

- 1. Cumulative Exams: shown to improve learning more than virtually every other technique. As noted above, exams are a part of the learning process, not just a part of assessment we will go over every exam (except, unfortunately, the final) in class or in a video on Zoom. *It is important to review and relearn the material as we build upon that information. This increases long-term learning!* There will be three exams and a cumulative final. All exams are somewhat cumulative, and the material does build on itself, so it is important to understand all the concepts as we go.
- 2. Group assignments will account for part of your grade (see below).

# More Information on Assessment:

# Exams

There will be three exams and a cumulative final. These will be given in class on the days listed. No exams will be dropped. To be fair to everybody, I will not answer ANY questions during exams – this puts everyone on equal footing during the exams. Tests will consist of some multiple-choice questions and some longer problems. The exams will not be strictly cumulative, but the material does build on itself, so it is important to understand all the concepts as we go. **Exams will be given in class on the days listed. If you miss an exam then the weight of your** final will be increased. Please do Not feel the need to try and reschedule an exam no matter the reason you miss one. We simply reweight the final in all circumstances. If you know in advance that you will miss an exam, sometimes we can arrange for you to take it a day or two early. Note that the exam dates below are <u>not</u> tentative – exams will be given in class on the days listed. NO EXAMS WILL BE DROPPED!!

#### Exam Schedule: all exams will be taken in class!

Exam 1: Thursday, February 13<sup>th</sup> Exam 2: Thursday, March 20<sup>th</sup> Exam 3: Thursday, April 24<sup>th</sup> Final Exam: Tuesday, May 6<sup>th</sup> at 4:30pm in our usual classroom

#### **Final Exam Conflicts**

Official University Policy states that: If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternative exam time for the <u>last</u> exam or exams scheduled on that day. To qualify for rescheduling final exam times, you must provide evidence that you have three or more exams on the same day, and arrangements must be made with your instructor no later than the standard last day to drop a course.

#### **Group Assignments:**

These cooperative learning exercises are extremely important. The group assignment dates are listed in the course outline. It is important not to miss these days without an excused absence. The object of these assignments is to work together and engage your brains in the learning process. The goal is NOT to try and finish the assignments quickly, or in most cases, to even finish them at all. You will receive a passing score of 90% just for being present and working on the in-class problems with your group. **You must put your phones away during these assignments.** Additionally, I will have a random member of a random group demonstrate the problem at the board, and if you are a member of the group that presents, it can raise your grade for that assignment. **You receive a grade for these assignments by being present on the day we begin the assignment. We will often work on these over the course of two class periods, and while it is important to be present the 2<sup>nd</sup> day as well, <u>the group assignment credit is given only on the first day of the assignment (which is also the day listed in the course outline).</u>** 

#### **Calculators:**

On some exams, the use of a calculator may be helpful. I will announce in-class during the lecture prior to exams whether you will have the option of using one on the day of the exam. You cannot use a graphing calculator. If you do not bring a calculator to the exam, then you will have to do without. You cannot use the same calculator as another student, and you cannot use your phone.

# Grading:

Recitation	6%
In-Class Group Assignments	9%
3 exams (20% each)	60%
Cumulative final exam	25%

#### **Grading Disputes:**

If you have a dispute on a test, then you must put your issue in writing and submit it to me. Subsequently, your entire exam will be re-graded. <u>Do NOT email me about a grading</u> <u>dispute.</u> I adhere strictly to the University guidelines on Incompletes ("An I is given only when students, *beyond their control*, have been unable to complete course requirements. A substantial amount of work must have been *satisfactorily completed* before approval for such a grade is completed."). Bad grades, unsatisfactory performance, too many credit hours, work conflicts, etc. are not reasons for an incomplete.

Grading Scale:	
Your Score	Grade
92% to 100%	А
90% to 91%	A-
88% to 89%	B+
82% to 87%	В
80% to 81%	B-
78% to 79%	C+
72% to 77%	С
70% to 71%	C-
68% to 69%	D+
62% to 67%	D
60% to 61%	D-
Below 59.5%	F

### **Additional Notes:**

#### Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the <u>Honor Code</u>. 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. Understanding the course's syllabus is a vital part in adhering to the Honor Code. All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: <u>StudentConduct@colorado.edu</u>. Students found responsible for violating the <u>Honor Code</u> will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit <u>Honor Code</u> for more information on the academic integrity policy.

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 <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. If you have a temporary illness, injury or required medical isolation for which you require adjustment, **If you are sick and will need an excused absence, unless you are incapacitated, you must notify me immediately (by email) in order to obtain that excused absence status.** 

# Accommodation for Religious Obligations

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 a timely manner. Let me know if you have any religious obligations, have conflicts with scheduled exams, assignments or required attendance within the first week of class and we will make arrangements. See the <u>campus policy regarding religious</u> observances for full details.

### 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.

# 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, marital 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 <u>Office of</u> <u>Institutional Equity and Compliance</u>.

# 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 abuse (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. 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>OIEC support resources</u> including confidential services can be found on the <u>OIEC website</u>.

Please know that faculty and graduate instructors are required to inform OIEC when they are made aware of incidents related to these concerns regardless of when or where something occurred. This is to ensure that individuals impacted receive outreach from OIEC about their options and support resources. To learn more about reporting and support for a variety of concerns, visit the <u>Don't Ignore It page</u>.

# 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 Academic Live Care site also provides information about additional wellness services on campus that are available to students. **If you are sick and will need an excused absence, unless you are incapacitated, you must notify me immediately (by email) in order to obtain that excused absence status.** 

### Any University policies that are in conflict with my own policies will supersede my policy!

A reply from one student to another on the discussion board for one of my colleague's online classes: "If you read the course syllabus you will find the answer to your questions. If you do not understand what you read, I recommend you read multiple times. After reading the syllabus if you still have questions come back and I will try to help you as much as possible."

