# ECONOMICS 3070 Intermediate Microeconomic Theory Fall 2025

**Professor:** Dr. Billy Mertens

Office: Econ 12

**Zoom Link:** https://cuboulder.zoom.us/j/5838330659

E-mail: mertens@colorado.edu While email is the best way to contact me, be aware that

I check my email and respond (if time) exactly twice every weekday. Once in the morning (typically between 9 and 10am, sometimes earlier). There is usually not enough time to respond to all emails during that time, but I will 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 Zoom

over the weekend if you give me plenty (2 weeks) of advance notice.

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

Office Hours: MWF 1:15pm – 2:15pm and by appointment TA and TA office hours: Undetermined as of Thursday, 8/21

## More about email:

Email is not a very efficient mode of communication when it comes to answering indepth concept, and also administrative-type questions. These are best asked when the whole class can benefit from the response. Time will be given at the beginning of every class for questions – please utilize this time if you have any questions. If it's something impossible to do at that time and you have class during my office hours, then you can email your question along with your official class schedule and we will set up a meeting.

## **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 discussed 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.

#### 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.

# **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</u> (see below), you will automatically fail the course!

### Attendance:

Attendance is crucial to success in this class because of the highly cumulative nature of the course material. Attendance will be taken each class and any student missing more than 20% (8 class meetings) of the course's scheduled classes will have their final grade reduced by a full letter grade. There is no distinction between excused and unexcused absences, with absences for all reasons, including illnesses and emergencies, counting towards this 8-class limit. Students therefore should not email me regarding their absences except in the case of very extenuating circumstances that will cause a multiple week absence, or if they also miss a group assignment. Students missing a class should remain aware of the attendance policy and follow the missed-class policy below. I reserve the right to record an absence for students who spend substantial class time on non-class activities.

## 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.

#### **Electronics in the Classroom**

Laptops, tablets, and even phones can actually play a role and benefit learning in many types of classes. There are many pros and cons to allowing consistent use of these devices during the class period. However, it has become abundantly clear to me that these devices are more of a distraction than a learning aid in most situations for economics courses. In addition, taking notes by hand has actually been shown to be more effective than taking them on a laptop or tablet., and use of devices has been shown to lower not only the grades of the users, but also of the surrounding students. Therefore, electronic devices, other than tablets used with a writing device, will NOT be allowed in the classroom (this includes cell phone use for texting, etc.). You especially cannot use any form of electronic device during Group Assignments (it defeats the purpose of working together). You should take a calculator to class on Group Assignment days and put your phone completely out of sight! If you are expecting an important call or text, then simply put your phone on vibrate, sit near the door, and step out when the call/text comes through. Otherwise, keep your phone in your pocket/bag, and **not** on your desk (or I may ask you to put it away or leave the class). Of course, if you have a disability services related need for these devices they will be allowed – in that case notify me of your exception ASAP.

## AI:

Please feel free to use AI on any homework/review sets if you find it helpful. It is also good for revising any emails you might be sending. Since there are no devices allowed during exams or group assignments, you obviously cannot use AI during exams or group assignments. It would defeat the purpose of doing the group assignments and we will go over the answers to every group assignment problem on the board. I expect everyone to use the restroom prior to our 3 hourly exams, so you can take the 50-minute (it often takes less than 50 minutes) exam without getting up. If you have a phone out during an exam for any reason, you will fail the class.

## **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.

# 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 not 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: Wednesday, September 24<sup>th</sup>

Exam 2: Friday, October 24<sup>th</sup> Exam 3: Friday, November 21<sup>st</sup>

Final Exam: Monday, December 9th at 1:30pm 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.

### Calculators:

On some exams, the use of a calculator may be helpful. I will announce in class the day before exams if you have the option of using one on the day of the exam. <u>Graphing calculators are NOT permitted.</u> If you do not take 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.

## **In-class Group Assignments and** *Grading of All Group Content***:**

The material for this class can be very complex and doing problems in class (often in groups with peer-input) has proven to be more beneficial than traditional problem sets and review problems. We will do in-class problems almost every week. No cell phones are allowed during these assignments!! You will lose points if you have them out.

These cooperative learning exercises (detailed below) 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. Additionally, I will often have a random member of a random group demonstrate a 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, the assignment credit is given only on the first day (which is also the day listed in the course outline).

#### **Recitations:**

Most weeks, you will have a brief quiz at the beginning of recitation and review for the rest of the period. On some weeks (following exams), you might cover some new material in recitation.

### TA:

#### **Grading:**

Recitation	9%
In-Class Group Assignments	9%
3 exams (19% each)	57%
Cumulative final exam	25%

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# **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 dispute.</u>

## Grading Scale:

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Your Score	Grade
92% to 100%	A
90% to 91%	<b>A-</b>
88% to 89%	B+
82% to 87%	В
80% to 81%	B-
78% to 79%	C+
72% to 77%	C
70% to 71%	C-
68% to 69%	D+

62% to 67% D 60% to 61% D-Below 59.5% F

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.

I am adamant about giving each student an equal opportunity to perform well in the course, so there will be no extra credit opportunities that are not offered to the entire class. You should focus your efforts on learning the material and doing well on the exams.

## **Additional Notes:**

#### **Honor Code**

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

## <u>Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation</u>

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

## **Preferred Student Names and Pronouns**

CU Boulder recognizes that students' legal information does not always align with how they identify. If you wish to have your preferred name (rather than your legal name) and/or your preferred pronouns

appear on your instructors' class rosters and in Canvas, visit the <u>Registrar's website</u> for instructions on how to change your personal information in university systems.

#### **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.

## Additional classroom behavior information

- Student Classroom and Course-Related Behavior Policy.
- Student Code of Conduct.
- Office of Institutional Equity and Compliance.
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## 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>OIEC@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 OIEC website.

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 the person impacted receives outreach from OIEC about resolution options and support resources. To learn more about reporting and support a variety of concerns, visit the Don't Ignore It page.

# 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."

