

**ECON 4070-**

Become comfortable using algebra, calculus, diagrams and excel spreadsheets to develop models that explain microeconomic questions.

Understand the philosophy of economics. Identify errors in economic analysis in the popular press and the wider community.

**Prerequisites**

Available to students who have completed *ECON 3070 Intermediate Microeconomic Theory*. Completion of *ECON 4808 Introduction to Mathematical Economics*, or the equivalent, is desirable, but not necessary. Please note that the course meets a requirement for The Actuarial Studies Certificate Program. The course will be taught with some mathematical emphasis. Students should be familiar with microeconomic principles, algebra, calculus, optimization techniques and probability covered in prerequisite classes, and be comfortable expressing these concepts in short-answer questions in homework assignments and examinations.

You will also require a high-speed Internet connection, a printer and a scanner to complete this course.

**Instruction Method**

I will conduct in person classes on Tuesday and Thursday that will include lectures, problem-solving and answers to your questions. All class materials, e.g., lecture notes, homework, problem sets, solutions, etc. will be available through Canvas.

There will be no in-person office hours this semester. I will be available Wednesday 2.30pm to 5pm for questions by email and Zoom (if necessary).

**Textbooks**

There is no required textbook for this class. Appropriate readings will be indicated during lectures and in my notes provided on Canvas. Your textbook from *ECON 3070 Intermediate Microeconomic Theory* will prove extremely useful for many topics. Alternatively, you may want to consider picking up a second-hand copy of *Microeconomics*, by David Besanko and Ronald Braeutigam, John Wiley & Sons and/or *Intermediate Microeconomics: A Modern Approach*, by Hal Varian, W.W. Norton and Company (any latter edition). Both books are available through closed reserve.

**Class requirements**

Attend classes on Tuesday and Thursday class from 9.35am to 10.50am. The critical thinking required for successful completion of this course may not come naturally for many students. In-class (and online)

Please inform me immediately if an unforeseen emergency, illness or safety concern impacts your performance. I can help, but I need to know your circumstances as soon as possible to consider suitable alternative arrangements.

Feel free to form socially-distant or online study groups to review and discuss lecture/reading material, homework assignments etc. However, you must submit individual work for grading. If you work with classmates on assignments, please list the names of these persons on the front page of your submitted assignment.

To successfully complete the class, each student should:

- (a) attend two 75-minute classes each week;
- (b) review and augment lecture notes after class;
- (c) be punctual, polite and respectfully engage in class discussion;
- (d) complete (a minimum of six out of seven) homework assignments;
- (e) complete one mid-term quiz;
- (f) complete one mid-term examination;
- (g) complete one final examination;
- (h) keep in touch with your Professor; and
- (i) carefully practice the University's health and safety measures.

*Cellular phones, laptops, tablets and other devices.* Personal use of these devices can distract my teaching and other student's learning. Please do not use your device to talk, text, go online, access social media, etc., in class. You may use your device for learning, e.g., electronic notes, photographs of the



**Campus and department policies**

The Department of Economics enforces prerequisites. Students without the appropriate prerequisite(s) may be administratively dropped.

Students and faculty each have responsibility for maintaining an appropriate learning environment. 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 differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's 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 appropriate changes to my records. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive climate of respect and inclusion.

maintain 6-foot distancing when possible;

**Class schedule, lectures, homework etc.**

Proposed topics are provided in the table over the page. Please note that the outline of topics is subject to change during the semester depending on how fast we work through the proposed topics (and the extent to which we are adversely impacted by external factors). Any changes will be announced in class and online through Canvas.

Please check Canvas and the syllabus regularly for changes.

Lecture notes and videos, assignment questions and solutions, and additional materials will be available through Canvas.

**Table 1. Proposed course outline**

Week	Date	Topic
1.	Jan 14	<b>Part I. Review</b> - Introduction
2.	Jan 19, 21	- Game theory
3.	Jan 26, 28	- Game theory
4.	Feb 2, 4	- Utility maximization with certainty
5.	Feb 9, 11	<b>Part II. Risk &amp; Information</b> - Uncertainty
6.	Feb 16, 18	- Uncertainty
7.	Feb 23, 25	- Insurance and diversification
8.	Mar 2 Mar 4	