

Instructor: Oleg Baranov (*Assistant Professor, Department of Economics*)

	Instructor Info		Class Info
Office:	ECON 14A	Class Location:	EDUC 155
Voice:	303.492.7869	Meeting Times:	TTH 2:00 – 3:15
Email:	oleg.baranov@colorado.edu	Office Hours:	MF 11:00 — 12:00
Website:	www.obaranov.com		(or by appointment)

1 Class Website

All course materials will be posted on the [Canvas](https://canvas.colorado.edu/) website that can be accessed at <https://canvas.colorado.edu/>.

2 Course Description

Topics in Microeconomics uses analytical techniques to examine optimal decision making under uncertainty including analysis of strategic situations. The course consists of three parts. Part I reviews probability concepts and introduces game theory. Part II examines risk and information in the context of utility maximization. Part III investigates problems with imperfect information such as adverse selection and moral hazard. **The course meets a requirement for the Actuarial Studies Certificate Program.**

3 Textbook/Readings

There is no required textbook for this class. Your textbook from ECON 3070 *Intermediate Microeconomic Theory* will prove extremely useful for many topics. Alternatively, you might consider picking up a second-hand copy of: *Microeconomics*, by David Besanko and Ronald Braeutigam, John Wiley & Sons; *Intermediate Microeconomics: A Modern Approach*, by Hal Varian, W.W. Norton and Company (any latter edition); or *Contract Theory*, by Patrick Bolton and Mathias Dewatripont, the MIT press.

4 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. The course will be taught with the 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.

5 Administrative Drops

Any student who miss **ALL** three first class meetings (14, 16 and 21 January) will be administratively dropped from the class.

6 Assessment

There will be two midterm exams, the final exam and five problem sets.

Problem Sets	6 problem sets	30% of the grade (dropping the lowest score)
Midterms		20% each
Final Exam		30%

There will be no make-up exams. A student who misses a midterm due to an excused absence will have the additional weight shifted to the final. Feel free to form study groups to review and discuss lecture/reading materials, and homework assignments but you must submit individual work for grading.

7 Tentative Course Outline

Week	Covered Material
<hr/> PART 1: PROBABILITY & GAME THEORY <hr/>	
1 - 2	Review of Probability
3 - 5	Game Theory
Feb 20th	MIDTERM I (in class)
 PART 2: RISK & INFORMATION	
6 - 7	Utility Maximization with Certainty
7 - 8	Uncertainty
8 - 9	Insurance and Diversification
9 - 10	Risky Assets
Mar 19th	MIDTERM II (in class)
 PART 3: IMPERFECT INFORMATION	
12 - 13	Adverse Selection
13 - 14	Signaling
14 - 15	Moral Hazard
15 - 16	Contracts
May 3rd	FINAL EXAM (at 4:30 pm, regular classroom) <hr/>

8 Tutors

The Economics Department provides a free drop-in tutorial lab which provides assistance on all core courses in the major, and occasionally on other undergraduate courses in the Department. See appropriate links here <https://www.colorado.edu/economics/undergraduate-program>.

9 University Policies

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 or injury, see [Temporary Medical Conditions](#) under the Students tab on the Disability Services website.

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 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 [classroom behavior](#) and the [Student Code of Conduct](#).

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.

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: 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 at the [Honor Code Office website](#).

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, intimate partner abuse (including dating or domestic violence), stalking, or protected-class discrimination or harassment by 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 cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

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. In this class, please see me at least two weeks prior to any conflicts due to religious observances.

See the [campus policy regarding religious observances](#) for full details.