ECON 4070   Topics in Microeconomics   Spring 2020

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 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 desir-
able. The course will be taught with the mathematical emphasis. Students should be familiar

7   Tentative Course Outline

Week	Covered Material
	PART 1: PROBABILITY & GAME THEORY
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 Diversi cation
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)**

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

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 a liation 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 463(s80 0 1hno8(erwg)-406(a idworea oflitg