ECON 4060 Choice Theory and Economic Ethics: Good, Bad

and Happiness

Fall 2024

Instructor: Yangwei Song (yangwei.song@colorado.edu)

Lecture: TTH 12:30-01:45 pm

Room: MUEN E431

Office Hours: T 9:30 to 10:30 am (ECON 14A)

Pre-requisites:

Requires prerequisite course is ECON 3070. Statistics is highly recommended: ECON 3818 or one

of the following approved statistics substitutes: APPM 4570, CHEN 3010, CSCI 3022,

CVEN 3227, MATH 3510, MATH 4520, STAT 3100, STAT 4000, STAT 4520.

Final: Sunday, Dec. 15, 4:30–7 p.m.

Course Description:

How do individuals make choices? In economics, it is standard to assume that individuals are

perfectly rational, self interested utility maximizers with unlimited cognitive abilities. What does

this mean and is it true? In many cases, the standard model provides a good approximation to the

types of behavior that economists are interested in. However, psychologists, experimental and

behavioral economists have documented ways in which the standard model fails to explain people's

choices. The goal of this course is to understand how individuals make choices and their

implications.

The objective of this course is to offer a foundational understanding of the key areas in choice

theory and behavioral economics, including choice under risk and uncertainty, reference

dependence, and intertemporal choices. For each area we will study four things:

• The standard theoretical choice model

• Some behaviors that the standard model cannot explain

• The behavioral models that have been developed to capture these behaviors

• Some applications of these behavioral models

Textbook:

• N. Wilkinson. An introduction to behavioral economics. Palgrave Macmillan, 2007 (Chapter 1-8)

Additional readings:

- A. Rubinstein. Lecture Notes in Microeconomic Theory (Chapter 4-5)
- Mas-Colell, Whinston, and Green. Microeconomic Theory. (Chapter 1,6)
- H. Varian. Intermediate Microeconomics A Modern Approach. W. W. Norton & Company. (Chapter 6-7)

Grading Policy:

Participation/attendance 10% + Exams 70% + Presentation 20%

The participation/attendance is based on iclicker.

There will be three open-book midterms. The first two exams will each contribute 25% to the final grade, while the third exam will contribute 20%. There will be no make-up exams or extra-credit assignments. If you miss an exam due to a medical or personal reason (with prior notification required), the weight of the missed exam will be redistributed among the remaining exams.

In terms of the final presentation, students are expected to read some papers on one of the topics covered in the course. The presentation can be about the outline of a new model, the description of a new an experiment, or an application of the models that we study in class in order to explain some real life phenomena. This can be a group project, which consists of at most three students. At the end of the semester, each group will do a presentation of 6-8 mins. Everyone in the same group will receive the same grade. A more detailed requirement for the project will be posted on Canvas.

Course Outline:

1. Introduction

We will introduce the definition of choice theory, which includes individual decision making and social choice. We will discuss examples to illustrate rational choice models and behavioral choice models.

• Reading: An introduction to behavioral economics (Chapter 1-2)

2. Preference and Choice

We will define preferences and choices in an abstract setting. We will define utility functions and introduce utility representation theorem. We will use preference-based and choice-based approaches to study choice. We will study the relationship between utility maximization and rational choice.

• Reading: An introduction to behavioral economics (Chapter 3) and Microeconomic Theory (Chapter 1)

Midterm 1 (October 8th)

3. Consumer Choice

As an application, we discuss consumer choice using the approaches introduced before.

• Reading: Lecture Notes in Microeconomic Theory (Chapter 4-5) and Intermediate Microeconomics A Modern Approach (Chapter 6-7)

4. Choice under Risk and Uncertainty

We will define risk and uncertainty. We will introduce two models of choice under risk: expected utility and rank dependent utility. We will then introduce two models of choice under uncertainty: subjective expected utility model and maxmin expected utility model.

• Reading: Microeconomic Theory (Chapter 6) and An introduction to behavioral economics (Chapter 4-5)

Midterm 2 (November 12th)

5. Reference Dependent Preferences

We will introduce examples that motivate the study of reference dependent preferences. We will study the loss aversion model and use it to explain some choice behaviors.

• Reading: Reference dependent preferences lecture note by Mark Dean

6. Intertemporal Choice

We will start with the discounted utility model. Then we will move to hyperbolic discounting model and study its implications on intertemporal choices. We will define temptation and self control problems and use hyperbolic discounting model to explain such problems.

• Reading: An introduction to behavioral economics (Chapter 7-8)

Final (December 15th)

SYLLABUS STATEMENTS

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, 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 Institutional Equity and Compliance</u>.

REQUIREMENTS FOR INFECTIOUS DISEASES

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all public health orders to reduce the risk of spreading infectious diseases.

The CU Boulder campus is currently mask optional. However, if masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class. Students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct & Conflict Resolution. Students who require accommodation because a disability prevents them from fulfilling safety measures related to infectious disease will be asked to follow the steps in the "Accommodation for Disabilities" statement on this syllabus.

For those who feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the <u>further guidance of the Public Health Office</u>. For those who have been in close contact with someone who has COVID-19 but do not have any symptoms and have not tested positive for COVID-19, you do not need to stay home.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

<u>Disability Services</u> determines accommodations based on documented disabilities in the academic environment. If you qualify for accommodations because of a disability, submit your accommodation letter from Disability Services to your faculty member in a timely manner so your needs can be addressed. Contact Disability Services at 303-492-8671 or <u>dsinfo@colorado.edu</u> for further assistance.

If you have a temporary medical condition or required medical isolation for which you require accommodation, send me an email. Also see <u>Temporary Medical Conditions</u> on the Disability Services website.

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.

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.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: honor@colorado.edu, 303-492-5550. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy.

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 violence (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who believe they 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 support resources can be found on the <u>OIEC website</u>.

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive an outreach from OIEC about their options for addressing a concern and the support resources available. To learn more about reporting and support resources for a variety of issues, visit Don't Ignore It.

RELIGIOUS HOLIDAYS

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