

# **ECON 4060 Choice Theory and Economic Ethics: Good, Bad and Happiness**

Fall 2025

**Instructor:** Yangwei Song ([yangwei.song@colorado.edu](mailto:yangwei.song@colorado.edu))

**Lecture:** TTH 12:30-01:45 pm

**Room:** ECON 117

**Office Hours:** TH 11:00 to 12:00 pm (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:** Tuesday, Dec. 9, 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)
- H. Varian. Intermediate Microeconomics A Modern Approach. W. W. Norton & Company. (Chapter 6-7)

**Grading Policy:**

Participation/attendance 25% + Midterm 35% + Final 40%

The participation/attendance is based on iclicker. For each class day (excluding exam days and canceled classes), the iClicker will be active from 12:15 PM to 1:00 PM. If you forget to join but attend class, or if you cannot attend for any reason, you must email me immediately after class to request an adjustment. Late requests will not be accommodated. Your participation grade will be determined by your total iClicker check-ins for the semester.

There will be one midterm and one final (open-book). There will be no make-up exams or extra-credit assignments. If you miss the midterm due to a medical or personal reason (with prior notification required), the weight of the missed exam will be redistributed to the final.

A curve will be applied to the final percentage grades, meaning that numerical scores may be adjusted upward. However, final letter grades are assigned based on relative performance in the class rather than on a fixed percentage scale. This ranking-based approach ensures consistency in grade distribution and prevents unintended grade inflation.

**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)*

- Midterm (October 7th)

### 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: *An introduction to behavioral economics (Chapter 4-5)*

### 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 9th)**

# Syllabus Statements

## Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the [Honor Code](#). 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: [StudentConduct@colorado.edu](mailto: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 [Honor Code](#) for more information on the academic integrity policy.

## Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

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](mailto:DSinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

If you have a temporary illness, injury or required medical isolation for which you require adjustment, please send me an email as soon as possible to inform me of your situation and discuss any necessary accommodations..

## 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. In this class, please notify me via email as soon as you are aware of a conflict so we can make appropriate 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 [Registrar's website](#) 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 [protected-class](#) 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 [OIEC@colorado.edu](mailto:OIEC@colorado.edu). Information about university policies, [reporting options](#), and [OIEC support resources](#) 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](#).