Syllabus

Course: ECON 416. Behavioral Economics. 3 Credits.

Course Description:

This course covers alternatives to the standard rational choice model featured in ECON 410. Four themes of choice are the pillars of the course: choice under certainty (e.g. menu and endowment effects), choice under uncertainty (e.g. prospect theory), intertemporal choice (e.g. hyperbolic preferences), and strategic choices (e.g., social preferences, envy, altruism).

<u>Target audience</u>: This course is aimed at anyone who completed ECON 410. Besides economics majors, this course is a great fit for psychology and business majors.

Requisites: Prerequisite, ECON 410 with a grade of C or better.

Grading status: Letter grade.

Class Schedule:

TuTh 8:00 am - 9:15 am Caroll Hall, Rm 111

<u>Instructor:</u>

Sérgio O. Parreiras Gardner Hall, 200B

sergiop@unc.edu,

Office Hours (OH):

over ZOOM on Wed: 3-4 pm.

Fri: 11–12 am, by Sakai appt.

Communication:

The Sakai website is our primary main of communication. All assignments, readings, grades, podcast links, other resources, etc... will be posted on Sakai. Please, use Sakai > Messages instead of regular email; Sakai > Sign-up to schedule a meeting. The sign-up opens seven days before and closes 24 hours before respective OH. Do not hesitate to send a Sakai message to schedule meetings outside regular OH if your schedule conflicts with the regular OH.

<u>Prerequisites:</u> Requisites: Prerequisite, ECON 410 with a grade of C or better.

Required Textbook:

"A Course in Behavioral Economics" by Erik Anger, any edition (CBE, hereafter)

Supplementary References:

Sapolsky, Robert M. Behave: The biology of humans at our best and worst. Penguin, 2017. "Behavioral Game Theory" by Colin Camerer.

Camerer, Colin F. Behavioral game theory: Experiments in strategic interaction. Princeton University Press, 2011.

Learning Objectives:

Identify failures of the standard rational choice model in predicting real-life behavior. Being able to use behavioral models understanding their advantages and limitations vis-a-vis the standard model.

<u>Class Structure</u>: First, we start with a quick review of the standard economic theory approach to a given topic. Second, we discuss data that conflicts with the predictions of the standard model. Third, we introduce alternative behavioral models. Finally, we address the limitations of the behavioral models.

Software:

Mathematica, which can be ordered free of any charges at https://software.unc.edu. No prior knowledge of Mathematica is required for one to succeed in this course.

Evaluation:

The course grade shall be based on: two midterms (40%), weekly group assignments (20%) and a final examination (40%).

Exam dates:

September 8th (first midterm), October 27th (second midterm), Final examination (TBA by the Registrar).

Class environment:

During this course, we shall employ additional material from TV, movies, or literature to discuss behavioral economics related issues. Sometimes, you may find the political or religious views; or the profanity contained in the additional material offensive or objectionable and you may feel uncomfortable. I will not endorse or advocate any particular political views but as part of your university education, it is important you engage in critical thinking and also respect different opinions expressed by your classmates. Our classroom will be an inclusive environment. Your participation is critical for the success of this course. You will be expected to read the assigned readings and ready to discuss them in the classroom.

Policies and procedures:

Community Standards and Mask Use:

All are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community — your classmates and me – as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the Office of Student Conduct. At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see Carolina Together.

Communication:

- Please, use Sakai to send me messages instead of regular email.
- All assignments should be submitted on Sakai.
- You will receive notifications for those classes in which Mathematica is required.

Honor Code: All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate the honor code, please see me or consult https://catalog.unc.edu/policies-procedures/honor-code/.

Exams and grades:

- There are no make-up exams. The weight of any missing midterm, provided justification, will be reallocated to the final examination.
- If you are eligible to take exams with Accessibility Resources and Service. Please schedule your exam using their hub, https://ars.unc.edu/, and please notify me as soon as possible.
- Any final-exams rescheduling requests, for those with more than three final exams within a 24 hours period, must be received no later than our first midterm.
- Exam grades are converted into scores ("curved") accordingly to the formula: original grade plus 100 minus the maximum between the top class grade and 50.
- Assignments or problem sets are not "curved".
- The course grade is computed accordingly to the table:

letter grade	minimum score
A	95
A-	90
B+	87
В	83
B-	80
C+	77

letter grade	minimum score
С	73
C-	70
D+	67
D	63
F	50

Tentative Coverage:

- (1) Introduction to Behavioral Economics (CBE, chapter 1)
 - (a) Thaler's Nobel Prize lecture
 - (b) Radio Lab Podcast: "Choice"
- (2) Rational Choice Under Certainty (CBE, chapter 2)
 - (a) Assumptions of preferences and utility representation theorems
 - (b) Revealed preferences and GARP (lecture notes)
 - (c) Readings:
 - (i) "Hans in Luck" by the Grimm Brothers
 - (ii) Kagel, John H., Raymond C. Battalio, Howard Rachlin, and Leonard Green. "Demand curves for animal consumers." The Quarterly Journal of Economics 96, no. 1 (1981): 1-15.
- (3) Decision Making Under Certainty (CBE, chapter 3)
 - (a) Opportunity costs, sunk costs
 - (b) Menu effects
 - (c) Loss Aversion
 - (d) Readings:
 - (i) Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Anomalies: The endowment effect, loss aversion, and status quo bias." Journal of Economic perspectives 5, no. 1 (1991): 193-206.
 - (ii) Chen, M. Keith, Venkat Lakshminarayanan, and Laurie R. Santos. "How basic are behavioral biases? Evidence from capuchin monkey trading behavior." Journal of Political Economy 114, no. 3 (2006): 517-537.
 - (iii) "The Mesolimbic/ Mesocortical Dopamine System" in Sapolsky (2017).
 - (e) Midterm 1
- (4) Probability Judgement (CBE, chapter 4)
- (5) Judgment under Risk and Uncertainty (CBE, chapter 5)
- (6) Rational Choice under Risk and Uncertainty (CBE, chapter 6)
- (7) Decision-Making under Risk and Uncertainty (CBE, chapter 7)
- (8) The Discounted Utility Model (CBE, chapter 8)
- (9) Inter-temporal Choice (CBE, chapter 9)
- (10) Midterm 2
- (11) Game Theory (CBE, chapter 10)
- (12) Nash equilibrium, Mixed Strategy Nash equilibrium
- (13) Subgame perfect Nash equilibrium
- (14) Behavioral Game Theory (CBE, chapter 11)
 - (a) Social preferences: Altruism, envy, fairness, and justice
 - (b) Intentions, reciprocity, and trust
 - (c) Limited strategic thinking
 - (d) Readings:
 - (i) Camerer (2011), chapters 2 (Dictator, Ultimatum and Trust Games) and 5 (Dominance Solvable Game).