Macalester College
Behavioral and Experimental Economics (Econ 490)
Professor Pete Ferderer
Spring 2016

Class Meeting Time: Tuesday & Thursday, 9:40–11:10 am
Classroom: Carnegie 305
Faculty Office: 310f Carnegie
Office Hours: Monday 9:00-11:00 am, Wednesday 1:00-2:30 pm and by appointment
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Course Description: This capstone course surveys recent developments in behavioral economics (a.k.a. Psychology and Economics). Behavioral economics draws on insights from other disciplines, particularly psychology and neuroscience, to explore three features of human behavior which have been deemphasized in the neoclassical paradigm: bounded rationality, bounded willpower and bounded self-interest. Bounded rationality implies that individuals have limited information processing abilities and, as a consequence, use simple heuristics (rules of thumb) to make decisions. While useful, heuristics can lead to biased probability judgments, overconfidence, status quo bias, loss aversion and other behaviors that influence economic outcomes. People exhibit bounded willpower when they make decisions that are dynamically inconsistent and in conflict with their long-term well-being (e.g., procrastination, under-saving, addiction, etc.). Bounded self-interest implies that, for example, concerns about fairness influence labor market outcomes and trust affects the gains from trade. By developing models based on realistic assumptions about human behavior, behavioral economics hopes to design better institutions and policies to reduce poverty, limit environmental degradation, promote financial and macroeconomic stability, and solve other problems confronting the world.

Behavioral economists often test theories about human behavior using experimental data collected in the laboratory or field. Experiments allow us to introduce controlled changes in the environment ("treatment effects") to better determine causal relationships. This course introduces students to the experimental methodology and is organized around a series of in-class experiments. Students are also required to write a term paper using experimental methods.

Prerequisites: Economics majors must complete Intermediate Microeconomics (ECON 361) and Introduction to Econometrics (ECON 381) before enrolling in this course. Psychology majors should have completed Research in Psychology 1 (PSYC 201) and Principles of Economics (ECON 119).

Readings and Videos: The primary readings for the course are:

(1) *Thinking, Fast and Slow*, 2011, by Daniel Kahneman.
(2) *Misbehaving: The Making of Behavioral Economics*, 2015, by Richard Thaler.

Both books are available in the bookstore and students should purchase a copy of each. In addition, we will read numerous journal articles which are provided on the course Moodle page. Many of the mathematical models used in this course can be found in "Psychology and Economics: Evidence from the Field," by Stefano DellaVigna, *Journal of Economic Literature*, 2009. Students are expected to do readings prior to class. We make extensive use of videos in this course and they can be found on the Moodle page as well.

Experiments: In-class experiments are a vital part of this course because they complement traditional methods of learning (reading, discussion, lecture, etc.). In addition, they are fun and often lead to unanticipated insights. Many of the experiments will be run online using *Veconla*b created by Charles Holt. I ask that students bring a laptop computer to class on days when online experiments are run. I have noted these days on the course outline. Student participation in experiments is required and missing class on days when experiments are conducted will lead to a lower course grade. I ask that each

student contribute $10 to a fund that will be used to compensate top performers in the experiments.

Final Grades: Final grades are based on:

Term Paper	30%
First Exam	20%
Second Exam	20%
Two-minute Papers, Quizzes, Homework	12%
Classroom Participation	12%
Article Presentation	6%

Because this is a capstone course, independent research plays an important role. Students are expected to design and conduct their own experiment, report the findings in a term paper and present it to the class. Exams, quizzes and two-minute papers will cover material from the readings and class lectures. Classroom participation grades are assigned after each class as follows: F= absent, C= present, B = criteria for C plus active listener and diligent experimental subject, A = criteria for B plus major contributions to class discussions. Each student is expected, either working alone or in groups of two, to present one article from the reading list. Eligible papers are marked by an asterisk and presentations should be 10-15 minutes in duration. These papers serve as good introductions into particular experimental literatures and are meant to help students choose topics for their term papers.

The Term Paper

Students are required to submit a term paper which explores an issue in behavioral economics. Unlike other courses where data are usually obtained from external sources, students must generate their own data using a laboratory or field experiment. One good option is to use the experimental software available online at *Veconlab*: http://veconlab.econ.virginia.edu/admin.htm. Students can see the wide array of experiments available at *Veconlab* by logging on as an administrator. Field experiments are also a good option and students in past years have studied behavior in Café Mac, the basketball court, high school classrooms, bus stops and other natural settings. Finally, collecting experimental data using online surveys has become popular in recent years and the Economics Department has purchased a license to Qualtrics which can be used for this purpose. In past years students have published their work in academic journals and won term paper competitions. Thus I encourage you to start early and aim high. I'm a big believer in the old adage that "two heads are better than one" and "the whole is greater than the sum of the parts." Thus I encourage students to work with a classmate and co-author a term paper.

Grading Rubric: The term paper grading criteria are given as follows:

(1) Is the **research question** relevant and novel?	15%
(2) Is the **theory** logically consistent and appropriately formalized?	15%
(3) Is **previous literature** fully discussed and properly integrated?	25%
(4) Does the **experimental design** allow the effect to be isolated and bias avoided?	25%
(5) Is the paper **well written**? (grammar, parsimony, organization)	20%
(6) Is the paper well presented in class (visuals, cadence, emphasis)	5%

Important Dates: I am asking students to do a lot in a short period of time. Thus it vital that everyone stay on task and meet the following deadlines:

- **February 16 (Tuesday):** The term paper proposal is due. This includes (a) a brief summary of two academic papers and (b) the question to be addressed in the term paper.
- **March 10 (Thursday):** The Second draft of term paper proposal is due. This should be at least two pages in length and include (a) a brief summary of five academic papers, (b) the question to be addressed, and (c) a description of the experimental design.
- **April 26 & 28 (Tuesday & Thursday):** Optional term paper presentations (10-12 minutes).
- **May 2 (Monday):** Final draft of term paper due at 5:00 PM.

Course Outline and Reading List

Note: Papers with an asterisk are eligible for student presentations and serve as introductions into particular experimental literatures.

Date	Topic	Readings, Experiments and Videos	Comments
1/21	Introduction	Thaler, *Misbehaving*, Ch. 1, 3-6 & 17. **Experiment: The Beauty Contest** Video: Kahneman's Georgetown Address	Bring laptop
Thinking About Thinking			
1/26	System 1 & 2	Kahneman, *Thinking, Fast and Slow*, Ch. 1-4.	
1/28	System 1 & 2	Kahneman, *Thinking, Fast and Slow*, Ch. 5-9. *Mani, et al., "Poverty Impedes Cognitive Function," *Science*, 2013.	
2/2	Heuristics & Biases	Kahneman, *Thinking, Fast and Slow*, Ch. 10-14. **Experiment: Bayes' Rule**	Bring laptop
2/4	Overconfidence	Kahneman, *Thinking, Fast and Slow*, Ch. 15-18. Deaves, et al., "An Experimental Test of the Impact of Overconfidence and Gender on Trading," *ROF*, 2009 (Only need to read through page 563.)	
Expected Utility and Prospect Theory			
2/9	Expected Utility Theory	Kahneman, *Thinking, Fast and Slow*, Ch. 25. **Experiments: St. Petersburg & Lotteries and Mugs** Holt, *Markets, Games and Strategic Behavior*, Ch. 4.	Bring laptop
2/11	Prospect Theory: Gains & Losses	Kahneman, *Thinking, Fast and Slow*, Ch. 26-28. Video: Kahneman's Nobel Prize Speech	
2/16	Prospect Theory: Probabilities & Ambiguity	Kahneman, *Thinking, Fast and Slow*, Ch. 29-34. Barberis, "30 Years of Prospect Theory in Economics: A Review and Assessment." *JEP*, 2013. (Good for term paper ideas; optional read) **Experiment: Ellsberg Paradox**	First Term Paper Proposal is Due
2/18	Deep Rationality	*Li, et al., "How Mating and Self-Protection Motives Alter Loss Aversion." JPSP, 2011. (Read lit review) Video: Chen's Monkey Studies Video: Tooby & Cosmides, Stone Age Minds (in class)	
2/23	**First Exam**		
Intertemporal Choice, Self-Control Problems and Happiness			
2/25	Exponential Discounting	Thaler, *Misbehaving*, Ch. 11.	
3/1	Hyperbolic Discounting & Self-Control	Thaler, *Misbehaving*, Ch. 12. Video: Chen on Language and Time Preference	
3/3	Empirical Tests of the Theories	*Graham, et. al., "Managerial Attitudes and Corporate Actions," *Journal of Financial Economics*, 2013. *Benjamin, et al., "Social Identity and Preferences," *American Economic Review*, 2010. *Booth and Nolen, "Gender Differences in Risk Behavior: Does Nurture Matter?" *The Economic Journal*, 2012. *Ariely and Wertenbroch, "Procrastination, Deadlines, and Performance," *Psychological Science*, 2002.	
3/8	The Economics of Happiness	Kahneman. *Thinking, Fast and Slow*, Ch. 35-38. McCloskey, "Happyism: The Creepy New Economics of Pleasure," *The New Republic*, 2012. *Stevenson and Wolfers, "Subjective Well-Being and	

		Income: Is there any Evidence of Satiation? CESIFO Working paper, 2103.	
Social Preferences			
3/10	Game Theory & Cooperation	**Experiment: Matrix Games** Holt, *Markets, Games and Strategic Behavior*, Ch. 3.	Bring laptop Second Term Paper Proposal is Due
Spring Break			
3/22	Fairness & Equity	**Experiment: Ultimatum and Dictator Games** Thaler, *Misbehaving*, Ch. 14-15. *Charness & Gneezy, "What's in a Name? Anonymity and Social Distance in Dictator and Ultimatum Games, *Journal of Economic Behavior and Organization*, 2008. *Andersen, et. al., "Stakes Matter in Ultimatum Games," *American Economic Review*, 2011.	Bring laptop
3/24	Trust & Reciprocity	**Experiment: Trust & Labor Markets** Norenzayan & Shariff, "The Origins and Evolution of Religious Prosociality," *Science*, 2008. *Henrich, et al., "In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies," *AER*, May 2001. Video: Trust, Oxytocin and Evolution (in class)	Bring laptop
3/29	Public Goods	**Experiment: Voluntary Contributions** Fehr and Fischbacher, "The Nature of Human Altruism," *Nature*, 10/23/2003. *Devlin-Foltz and Lim, "Responsibility to Punish: Discouraging Free-Riders in Public Goods Games, AEJ, 2008.	Bring laptop
3/31	The Role of Emotions	Greene, *Moral Tribes*, Ch. 2. *Winter, et al., "Rational Emotions," Work Paper, 2014. Levitt & List, "What do Laboratory Experiments Measuring Social Preferences Reveal about the Real World?" JEP, Spring 2007.	
4/5	**Second Exam**		
Decision Making in Groups			
4/7	Judgment Aggregation	**Experiment: Jelly Beans** Surowiecki, *The Wisdom of Crowds*, Ch. 1 & 2 Charness and Sutter, "Groups Make Better Self-Interested Decisions," *JEP*, 2012.	
4/12	Social Learning	**Experiment: Information Cascades** Bikhchandani, et al., "Learning from the Behavior of Others: Conformity, Fads, and Informational Cascades," *JEP*, Summer 1998. *Anderson, "Payoff Effects in Information Cascade Experiments, *Economic Inquiry*, 2001.	Bring laptop
4/14	Financial Markets	**Experiment: Limit Order Asset Market** Thaler, *Misbehaving*, Ch. 20	Bring laptop
4/19	Financial Markets	Thaler, *Misbehaving*, Ch. 21-24. Video: Barberis on the Financial Crisis	
4/21	Policy Implications	Thaler, *Misbehaving*, Ch. 31-33.	
4/26		Term Paper Presentations	
4/28		Term Paper Presentations	