

Bowdoin College, Department of Economics
ECON 3533: Behavioral Economics
Spring 2023

"I can calculate the motion of heavenly bodies but not the madness of people." — Isaac Newton

"We are all behavioral economists now." — Joel Sobel (contemporary economist)

Time & Class Location: T, R 10:05-11:30, Hubbard 022

Professor: Dan Stone

Email: dstone@bowdoin.edu (feel free to email me questions)

Office & Drop-in Hours: Hubbard 108; M, W 2:15-4:00. If you'd like to meet and can't make it at those times, don't hesitate to email to set up an appointment.

Prerequisites: Intermediate micro (Econ 2555) and statistics (Econ 2557) or equivalent.

Course description and learning goals: This course covers the main topics of behavioral economics—the study of violations of the standard economic assumptions that individuals optimize stable and purely self-interested objective functions. [Diamond and Vartiainen \(2007\)](#) provide a good description: *"Behavioral economics is an umbrella of approaches that seek to extend the standard economics framework to account for relevant features of behavior that are absent in the standard economics framework. Typically, this calls for borrowing from the neighboring social sciences, in particular from psychology and sociology. The emphasis is on well-documented empirical findings: at the core of behavioral economics is the conviction that making our model of an economic man more accurate will improve our understanding of economics, thereby making the discipline more useful."*

In other words: behavioral economics is fundamentally pragmatic. Behavioral economists want to understand human behavior as well as possible (with the goal of making economics more useful). So, we use findings and ideas from other disciplines (mostly psychology) to the extent that they're helpful for understanding behavior. We'll also study some questions traditionally considered part of other disciplines (mostly psychology) if we feel that those questions are still unresolved.

One key difference between behavioral economics research and research on similar topics from other social sciences is that, like all economists, behavioral economists use mathematical models to express ideas and assess logical implications of changing assumptions. So, while this isn't a modeling-intensive course, we'll be covering basic behavioral economic models throughout the semester, and **our learning goals for the course include learning both behavioral economic concepts and models.**

But, as noted in the Diamond and Vartianen quote, behavioral economists don't reject the standard economic framework, rather, we seek to extend it. In fact, even behavioral economists typically try to explain behavior with the standard-rational model first, then look for 'non-standard' explanations only if necessary. (A second key difference between behavioral economics and other social sciences is that behavioral economists use the standard-rational model as a benchmark, which often makes it easier to identify "mistakes.") So, **in addition to learning the main topics of behavioral economics, this course will also serve as a review of many topics/models from standard microeconomic theory.**

Another goal of the class is to help you better understand behavior you encounter in everyday life—why people act in seemingly puzzling ways—and **to help you better understand, and improve, your own judgment and decision-making.** That means to sometimes make more rational decisions in the traditional

sense—and to sometimes be more rational in a broader, less direct sense. **A final goal of the class is that I hope it will help improve both your oral and written communication skills, and comfort participating in somewhat large group discussions.**

Format: The main assignment for this course is an approximately 10-page research paper, which will be due at the end of the semester, and a 10-15 minute presentation on your research. In a nutshell, you will do an in-depth study of a specific topic of your choice, in which you apply and expand on material we've learned throughout the term and material you've learned in other economics classes. I'm very flexible about topics for this and encourage you to work on a topic that you're excited to really dig into. Relevant deadlines are on the course schedule below, and more details TBA.

Prior to the paper, we'll cover the major topics in behavioral economics via a combination of readings, discussion, lecture, and modeling to clarify abstract concepts. Since this is a seminar class, you will be expected to participate in class discussions on a regular basis. This will enhance your class experience and learning – the more you participate, the more engaged and focused you'll be; you'll learn more, and you'll help others (and me) learn more. There will also be three in-class quizzes to assess, and incentivize, how well you're keeping up.

The schedule of readings is below – you should refer to this throughout the term to know what to read for each class, though I may often make modifications, which I'll communicate by email with ample notice. I recommend writing down comments or questions that occur to you while doing the readings that might be worth sharing with the class. I will sometimes give you discussion questions to consider in advance or post comments on to Canvas. If you miss class, please email me or the entire class (or post to Canvas) comments on the reading before class starts. More info on how participation grades are determined to come.

Grading and communication/feedback: Your course numeric grade will be calculated as a weighted average as follows:

Participation – pre-spring break	10%
Participation – post-spring break	10%
3 Quizzes	15% (each)
Paper outline	5%
Presentation	5%
Paper	25%

I use a 10-point scale for letter grades with 3 point increments for 'half-grades' ($\geq 93.0 = A$; ≥ 90.0 and $< 93 = A-$, ≥ 87.0 and $< 90 = B+$, etc) with the potential for some grades being curved upward. Don't hesitate to come to my office hours or set up an appointment any time you'd like to discuss anything or if you feel you need additional feedback. If you have questions on how you are doing grade-wise at any point during the semester, let me know. All course documents and grades will be posted to Canvas or emailed to you. I'll provide you with an online form to provide anonymous (constructive!) feedback *to me* throughout the semester.

Books:

Thinking, Fast and Slow, Daniel Kahneman, 2011 (2002 Econ Nobel laureate)

Misbehaving, Richard Thaler, 2015 (2017 Econ Nobel laureate)

Selections (that I will provide) from Scout Mindset (Julia Galef – Econ PhD dropout!), Animal Spirits and Phishing for Phools (both by Akerlof and Shiller, 2001 and 2013 Econ Nobel winners, respectively), Nudge: The Final Edition (Thaler and Sunstein); Bayes Rules! (Johnson et al, 2021).

Articles (PDFs or links on Canvas or distributed by email):

- Avery, M. et al. "Why Don't We Sleep Enough? A Field Experiment Among College Students," *Review of Economics and Statistics* (forthcoming).
- Barberis, N. "Thirty Years of Prospect Theory in Economics: A Review and Assessment." *Journal of Economic Perspectives*, 2013. <http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.27.1.173>
- Bénabou, R. and Jean Tirole "Mindful Economics: The Production, Consumption, and Value of Beliefs." *Journal of Economic Perspectives*, 2016.
- Bikhchandani, S., et al. "Information Cascades and Social Learning." NBER WP, 2021.
- Bursztyn, L. and Jensen, R. "Social Image and Economic Behavior in the Field: Identifying, Understanding, and Shaping Social Pressure." *Annual Review of Economics*, 2017.
- Crawford et al. "Structural Models of Nonequilibrium Strategic Thinking: Theory, Evidence, and Applications." *Journal of Economic Literature*, 2013.
- Fehr and Schmidt. "The Economics of Fairness, Reciprocity and Altruism – Experimental Evidence and New Theories." <http://epub.ub.uni-muenchen.de/13484/1/66.pdf>
- Frederick, Loewenstein and O'Donoghue. "Time Discounting and Time Preference: A Critical Review." *Journal of Economic Literature*, 2002.
- Grubb, M. "Overconfident Consumers in the Marketplace." *Journal of Economic Perspectives*. 2015.
- Mailath, G. "Do People Play Nash Equilibrium? Lessons From Evolutionary Game Theory." *Journal of Economic Literature*, 1998.
- Nussbaum, E. "What Tina Fey Would Do for a SoyJoy", *New York Magazine*, 10-3-2008.
<http://nymag.com/news/features/51014/>
- Rabin and Thaler. "Anomalies: Risk Aversion." *Journal of Economic Perspectives*, 2001.
- Surowiecki, J. "Later: What does procrastination tell us about ourselves?" *The New Yorker*, 2010.
- Tabarrok, A. "A phool and his money." <http://newramblerreview.com/book-reviews/economics/a-phool-and-his-money>.
- Sunstein and Thaler, "THE TWO FRIENDS WHO CHANGED HOW WE THINK ABOUT HOW WE THINK," *The New Yorker*, Dec 7, 2016.
- Wallace, David Foster. "This is water." <https://www.youtube.com/watch?v=xoblutORPNA>.

A few other references worth noting:

- Academic surveys: Rabin (JEL, 1998); DellaVigna, (JEL, 2009); Handbook of Behavioral Economics (2018), edited by Bernheim, DellaVigna, Laibson.
- Recommended non-academic resources (written for general audiences) on various topics: the 90s stock market boom - Irrational Exuberance, Shiller; personal history of Kahneman/Tversky - The Undoing Project, Michael Lewis; rationalizations of very behavioral-seeming phenomena – Elephant in the Brain, Simler and Hanson; the psychology of optimal belief formation – Superforecasting, Tetlock; improving one's own decisions and poker – The Biggest Bluff, Konnikova; the behavioral econ of baseball without much discussion of behavioral econ per se – Inside Game, Law; global poverty/development – Poor Economics, Banerjee and Duflo (behavioral-ish); poverty/inequality in developed countries - Scarcity, Mullainathan and Shafir; good website on behavioral science (with articles by behavioral economists and researchers from other disciplines): <http://behavioralscientist.org/>, and good site on improving personal decision-making <https://www.clearerthinking.org/home-new>

Course schedule and readings (subject to change; events to note in **bold**, readings are required unless noted otherwise)

24-Jan Syllabus; brief history and definition of behavioral econ

Part I: Non-standard belief formation

- 26-Jan Two systems ('Psych 101') (Kahneman, Introduction, Chs 1-4, 6-7; don't worry about the "Speaking of" parts at the end of the chapters throughout the book)
- 31-Jan Hot hand/gambler's fallacy/ law of small numbers; Bayes' rule (Kahneman, Ch. 10; Johnson et al Ch 1 through 1.2, <https://www.bayesrulesbook.com/chapter-1.html>)
- 2-Feb Stock mkt applications; anchoring, availability, representativeness (Kahneman, Chs 11-13, Optional on finance: Misbehaving p.205-209 (to "Keynes is now remembered...") and ch 22)
- 7-Feb Biases continued: conj fallacy, reg to mean, causal stories (Kahneman, Chs 14-18)
- 9-Feb Overconfidence (Kahneman, Chs 19-22; overprecision vs overoptimism, Grubb intro; DFW Kenyon)
- 14-Feb Overconfidence ctd (Kahneman, Chs 23-24, more on motivated reasoning: Benabou and Tirole, JEP 2016, up to "Portable Paradigm," selections from Galef)
- 16-Feb **Quiz 1**

Part II: Non-standard decision-making

- 21-Feb Loss aversion/endowment effect (Kahneman, Part IV, Chs 25-28)
- 23-Feb Implications of EU and prospect theory (Rabin and Thaler, 2001 JEP; Barberis 2013 JEP)
- 28-Feb Probability weighting/risk (Kahneman, Chs 29-32)
- 2-Mar No class (I'm away for conference). Kahneman, Chs 33-34; Nudge selection
- 7-Mar Thaler's take; sunk costs (Thaler Preface and Chs 1-10)
- 9-Mar **Quiz 2**

Spring break (!)

- 28-Mar Game theory (failures of NE - Mailath, 1998, sect 1-2; level-K: Crawford et al, 2013, p.5-7 + sect 2.4)
- 30-Mar Games ctd (Nussbaum) and time inconsistency (hyperbolic discounting, self-control problems) (Frederick et al, JEL, 2002 sections 1, 2, start of 3 (until 3.1), 4-4.1)
- 4-Apr Time continued (Thaler, Chs 11-12; Surowiecki; Avery et al, intro)

Part III: Social influence

- 6-Apr Social pressure (Bikhchandani et al, 2021; Nudge ch 3)
- 11-Apr Social pressure ctd (Bursztyn and Jensen, 2017)
- 13-Apr Social preferences (Fehr and Schmidt introduction; Thaler, p.125-6 + chs 14-15)
- 18-Apr Social preferences ctd continued (Akerlof and Shiller, Animal Spirits ch(s), CSR reading)
- 20-Apr Big picture: happiness/utility/equilibrium mkt failure (reading TBD from: Kahneman, Chs 35-38); recent 'unification of BE' work, e.g. Zinman et al, Gabaix)/critiques/responses/new directions/policy (Thaler Chs 31-33 and Conclusion, conclusion; Akerlof and Shiller, Phishing chapter(s), Basu, JEL)

April 21, 5pm: deadline for paper topic approval (start your research...)

- 25-Apr **Quiz 3**
- 27-Apr Research project working class/**paper outline due**

May 2, 4, 9: Student presentations

TBD: **final paper due**