**Econ 3209: Behavioral Economics**

University of Connecticut, Spring 2023

Monday and Wednesday, 6:10 – 7:25pm

Modality: In person

Classroom: FSB 103

**Instructor Information**

Professor Remy Levin

Email: [Remy.levin@uconn.edu](mailto:Remy.levin@uconn.edu)

Office: Oak 328

Office Hours: Mondays 3:30 – 4:30 pm, and by appointment

TA: Leo Z. Wu

Email: [zhengxuan.wu@uconn.edu](mailto:zhengxuan.wu@uconn.edu)

Office Hours: Tuesdays 10:00 – 11:00 am, Oak 336B, and by appointment

**Course Overview**

Behavioral Economics is a growing and exciting field of economics. It includes work on psychology-informed economic models of individual decision-making, collective behavior, and strategic interaction, as well as applications of these models to empirical subfields such as development economics and health economics. This class is a rigorous introduction to the field for advanced undergraduate students. It is a theory class whose primary language is mathematics. While the material is mostly self-contained, and the math required is not too advanced, the concepts we will be studying are deep and can be difficult to fully grasp on a first pass. **To succeed in this class, you should expect to dedicate a significant amount of time and effort both in and out of class.**

Since the scope of Behavioral Economics is vast, it is not possible to do justice to the entire field in the span of a single semester. Therefore, in this class we will be focusing on behavioral models of individual decision-making, an area also known as behavioral decision theory. Within this area we will focus on four primary topics. We will start by discussing how economists think about what it means to be rational. This will involve building up an axiomatic theory of choice when outcomes are certain. Next, we will focus on probability theory and the ways that individuals perceive (and misperceive) probabilistic events, as well as how they learn when receiving new information. Following this we will examine how individuals make decisions in the face of risk and uncertainty. Finally, we will study how individuals make decisions in dynamic settings, i.e. those that involve choices over time.

The general set-up for the class is as follows: in each module we will start by introducing and analyzing a canonical (aka “neoclassical”) economic model of choice. For instance, we will spend some time setting up the Expected Utility model, the standard way that economists think about risky decision-making, and discuss its structure and limitations. What are the model’s underlying assumptions? Are they realistic? Do they hold in the real world when confronted with the data? We will then set up and explore the main alternative behavioral models (in this example, prospect theory). In the course of doing so we will also explore empirical research (often, but not always, experimental in nature) that can help us distinguish between the neoclassical and the behavioral models.

In addition to the core content of the class, you will be exposed to some of the breadth of the field through a writing assignment. This will involve reading three scientific papers from one of the “capsule collections” on a given topic and writing a short paper comparing and critiquing them. Details on these readings and the writing assignments are below.

This class has three primary learning objectives. The first is to introduce you to key models and concepts in behavioral economics. The second is to help you gain a deeper understanding of economics generally by turning a critical eye on its foundations. The third is to further your scientific literacy through exposure to cutting edge research in the field. These three goals are in service of the overarching aim of helping you further develop your own critical thinking skills.

**Prerequisites**

ECON 2201/2211Q and STAT 1000. Familiarity with microeconomic theory and concepts is particularly important. Since this is a theory class, we will be using a fair bit of math, and comfort with probability and statistics is particularly important.

**Textbook and Readings**

We will use **Angner’s *A Course in Behavioral Economics, Third Edition***. The book is required for the class, with assigned readings and homework from it. The paperback edition is available [on Amazon](https://smile.amazon.com/Course-Behavioral-Economics-Erik-Angner/dp/1352010801/ref=asc_df_1352010801/?tag=hyprod-20&linkCode=df0&hvadid=475689877582&hvpos=&hvnetw=g&hvrand=13417220145306460986&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9003212&hvtargid=pla-448075804465&psc=1&sa-no-redirect=1) ($23 rental or $55 purchase). You’ll find that the book provides a somewhat different, but useful perspective on the material we cover in class.

For Module 2 I also strongly recommend two additional “readings.” First, pick up a physical copy of [Bayesian Probability for Babies](https://smile.amazon.com/Bayesian-Probability-Babies-Chris-Ferrie/dp/1492680796?sa-no-redirect=1).Second, watch three videos on Bayesian updating from math content creator ***3Blue1Brown***on YouTube *(video* [***1***](https://www.youtube.com/watch?v=HZGCoVF3YvM&ab_channel=3Blue1Brown)*,* [***2***](https://www.youtube.com/watch?v=U_85TaXbeIo&ab_channel=3Blue1Brown)*,* [***3***](https://www.youtube.com/watch?v=lG4VkPoG3ko&ab_channel=3Blue1Brown)). Both of these resources are aimed at helping you gain a deeper, more intuitive understanding of Bayesian updating, which is one of the more difficult (and valuable) parts of this course. The book is only $10 on Amazon, and it makes for a great present for the pregnant nerd in your life down the road.

For the term paper assignment, I will ask you to read three scientific papers from capsule collections on behavioral economics topics which I have curated for you (see below). These are available on HuskyCT. Throughout the semester, I will reference various scientific papers in class. All papers I reference are posted on HuskyCT, in case you’d like to dig deeper.

**Course and Readings Schedule (subject to change)**

***Module 0: Preliminaries (Class 1, 1/18)***

* Introductions + syllabus overview
* What is Behavioral Economics, and where does it come from?

***Module 1: Rationality and Decisions under Certainty (Classes 2-8, 1/23 – 2/13)***

* What does it mean to be rational?
* Preferences, choices, and utility
* Menu dependence: choice overload, the decoy effect, and the compromise effect
* Reference point phenomena: status quo bias, loss aversion, and the endowment effect

*Reading: Angner chapters 2, 3.1, 3.4, 3.5*

***Module 2: Probability and Judgement (Classes 9 – 14, 2/15 – 3/6)***

* Beliefs and learning
* Fundamentals of probability theory, Bayes’ rule, and Bayesian updating
* Biased beliefs: overconfidence, the gambler’s fallacy, and hot hand bias
* Biased learning: Base-rate neglect and confirmation bias

*Reading: Angner chapters 4, 5.2, 5.4, 5.5, 5.7, 5.8*

*Bayesian Probability for Babies*

*Watch:* ***3Blue1Brown*** *on Bayesian updating (video* [***1***](https://www.youtube.com/watch?v=HZGCoVF3YvM&ab_channel=3Blue1Brown)*,* [***2***](https://www.youtube.com/watch?v=U_85TaXbeIo&ab_channel=3Blue1Brown)*,* [***3***](https://www.youtube.com/watch?v=lG4VkPoG3ko&ab_channel=3Blue1Brown)*)*

***Midterm Exam (Class 15, 3/8)***

***Module 3: Decisions under Uncertainty (Classes 16 – 23, 3/20 – 4/12)***

* Risk vs. uncertainty
* The standard models: objective and subjective expected utility theory
* Challenges to EUT and SEU: Rabin’s calibration argument, the Allais paradox, the Ellsberg paradox
* Prospect theory

*Reading: Angner chapters 6, 7.1, 7.2, 7.4, 7.7, 7.6, 7.5, 7.8*

***Module 4: Decisions over Time (Classes 24 – 27, 4/17 – 4/26)***

* The standard model: exponentially discounted utility
* Challenges to EDU: self-control, procrastination, and demand for commitment
* Beta-delta discounting
* Partially sophisticated beta-delta

*Reading: Angner chapters 8, 9.1, 9.2, 9.3, 9.5, 9.6*

***Final Exam (5/1 – 5/5, exact date/time TBD)***

**Grading**

Grades in the class will be based on the submission of four problem sets, one term paper, two exams, and participation in class discussion, with the following formula:

Problem Sets – 4 x 5% = 20%

Midterm – 25%

Term Paper – 20%

Final – 30%

Participation – 5%

**Assignment schedule and important dates**

All assignments must be turned in by the beginning of class on the indicated day. Except in exceptional circumstances approved by the instructor, late assignments will be subject to a penalty of one point (out of five) for each day they are late.

* Feb. 9th – Review section 1
* Feb. 13th – Problem set #1 due
* Mar. 2nd – Review section 2
* Mar. 6th – Problem set #2 due
* Mar. 8th – **Midterm exam**
* Mar. 10th – Term paper topic due
* Apr. 3rd – **Term Paper due**
* Apr. 10th – Review section 3
* Apr. 12th – Problem set #3 due
* Apr. 24th – Review section 4
* Apr. 26th – Problem set #4 due
* May 1st – May 5th (exact date TBD) – **Final exam**

**Review Sections**

Our TA will hold review sections on the days prior to when the problem sets are due, to go over solution methods for the problems. Be on the lookout for scheduling details for these sections.

**Term Paper**

The goal of this writing assignment is to expose you to topics in behavioral economics that are outside of the core material in the class, and to give you practice in critically reading scientific papers in economics. To start, **choose 3 papers from one capsule collection below (or 2 papers from one capsule collection + 1 crossover paper from another)**. Read these with a critical eye and consider their methods, messages, and the contrasts between them. Then write a term paper in which you do the following:

* Briefly **summarize** the methods and the main findings in the papers. If the papers include models, explain the primary insights driving the theoretical results. If they contain experiments or studies using observational data, briefly explain the empirical methods used.
* **Compare** the approaches and results of the papers. How does the first paper approach the question at hand? Is it different from how the second and third paper do so? Do the messages/results tell a cohesive story, or are they in tension? Why might that be?
* **Connect** the readings to the material we have covered in class. How has what you’ve learned in class this semester informed your reading of the papers?
* **Critique** the methods and results in the papers. Are they good science? What did the authors do well, and what could they have done better? Is one paper better than the other? In what ways, and why?
* **Propose an extension** to the papers. Imagine that you were a researcher working in this area. Based on your reading, what question would you like to answer next? How would you go about answering it? Be curious and creative!

The term paper will be graded on three components. **You must submit your choice of which capsule collection (and which papers within it) you intend to write about by March 10th** **on HuskyCT**. Submission of your topic and papers on time will be worth 2/20 of the points for the assignment. In addition, **you may receive 0.5 points of extra credit for submitting a physical, properly formatted copy of your paper**.

The remaining points will be allocated based on the quality of your final term paper. Your term paper must be **no more than 2000 words**. Longer papers will be penalized. Your term paper is due at the beginning of class on April 3rd. Except in extraordinary circumstances, **late submissions will not be accepted**.

**Capsule collections for term paper**

*All papers are available on HuskyCT in the Readings folder.*

**Behavioral Economics in Developing Countries**

* Mani et al. (2013). **Poverty****impedes Cognitive function.** *Science*
* Dalton et al. (2015). **Poverty and aspirations failure.** *The Economic Journal*
* Delavande and Kohler (2009). **Subjective expectations in the context of HIV/AIDS in Malawi.** *Demographic Research*
* Schilbach (2019). **Alcohol and self-control: A field experiment in India.** *American Economic Review*
* Jakiela and Ozier (2016). **Does Africa need a rotten kin theorem? Experimental evidence from village economies.** *The Review of Economic Studies*
* Ashraf, Karlan, Yin (2006). **Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines.** *The Quarterly Journal of Economics* [**Crossover paper**: may be combined with two papers from **Behavioral Perspectives on Gender**]

**Behavioral Perspectives on Gender**

* Falk and Hermle (2018). **Relationship of gender differences in preferences to economic development and gender equality.** *Science*
* Eckel, Füllbrunn (2015). **Thar she blows? Gender, competition, and bubbles in experimental asset markets.** *American Economic Review*
* Exley, Niederle, Vesterlund (2020). **Knowing when to ask: The cost of leaning in.** *Journal of Political Economy*
* Ashraf (2009). **Spousal Control and Intra-Household Decision Making: An Experimental Study in the Philippines.** *American Economic Review* [**Crossover paper**: may be combined with two papers from **Behavioral Economics in Developing Countries**]
* Bohren, Imas, Rosenberg (2019). **The Dynamics of Discrimination: Theory and Evidence.** *American Economic Review*
* Giffin (2020). **Endogenous identity formation and gender differences.** *Working Paper* [**Crossover paper**: may be combined with two papers from **Social Learning, Norms, and Moral Systems**]

**Altruism**

* + Andreoni (1990). **Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving.** *The Economic Journal*
  + Simon (1993). **Altruism and Economics.** *American Economic Review Papers and Proceedings* [**Crossover paper**: may be combined with two papers from **The Origin of Preferences** or with two papers from **Social Learning, Norms, and Moral Systems**]
* Andreoni and Vesterlund (2001). **Which is the fair sex? Gender differences in altruism.** *The Quarterly Journal of Economics*[**Crossover paper**: may be combined with two papers from **Behavioral Perspectives on Gender**]
  + Dana, Weber, Kuang (2007). **Exploiting moral wiggle room: Experiments demonstrating an illusory preference for fairness.** *Economic Theory*
  + Piff et al. (2017). **Higher social class predicts increased unethical behavior.** *Proceedings of the National Academy of Sciences*
  + Andreoni, Nikiforakis, and Stoop (2021). **Higher socioeconomic status does not predict decreased prosocial behavior in a field experiment.** *Nature Communications*

**The Origin of Preferences**

* Apicella et al. (2014). **Evolutionary Origins of the Endowment Effect: Evidence from Hunter-Gatherers.** *American Economic Review*
* Cesarini et al. (2009) **Genetic variation in preferences for giving and risk-taking**. *The Quarterly Journal of Economics* [**Crossover paper**: may be combined with two papers from **Altruism**]
* Galor, Özak (2016). **The Agricultural Origins of Time Preference.** *American Economic Review*
* Nunn and Watchekon (2011). **The slave trade and the origins of mistrust in Africa.** *American Economic Review* [**Crossover paper**: may be combined with two papers from **Behavioral Economics in Developing Countries**]
* Doepke and Zilibotti (2017).**Parenting with style: altruism and paternalism in intergenerational preference transmission.** *Econometrica*
* Levin and Vidart (2022). **Risk-Taking Adaptation to Macroeconomic Experiences.** *Working paper*

**Social Learning, Norms, and Moral Systems**

* Chandrasekhar et al. (2018). **Signaling, shame, and silence in social learning***. Working paper*
* Enke and Zimmerman (2017). **Correlation neglect in belief formation***. The Review of Economic Studies*
  + Henrich et al. (2010). **Markets, religion, community size, and the evolution of fairness and punishment.** *Science* [**Crossover paper**: may be combined with two papers from **The Origin of Preferences**]
* Enke (2019). **Kinship, cooperation, and the evolution of moral systems.** *The Quarterly Journal of Economics*
* Bryan et al. (2021). **Randomizing religion: the impact of Protestant evangelism on economic outcomes.** *The Quarterly Journal of Economics* [**Crossover paper**: may be combined with two papers from **Behavioral Economics in Developing Countries**]
* Bursztyn et al. (2020). **Misperceived social norms: women working outside the home in Saudi Arabia.** *American Economic Review* [**Crossover paper**: may be combined with two papers from **Behavioral Perspectives on Gender**]

**Laptops and phones in class**

The research is very clear on the effects of using laptops and phones in class – they are a distraction both for you and for those around you. Therefore, **I have a strict policy of no laptops or phones in class**, except in the case of a documented disability that requires their use. If you have such a documented disability, please let me know as soon as possible, and we will figure out a reasonable accommodation.

**Masking in class**

Masking is not currently required in instructional settings at UConn. I urge you to take a common sense approach to this issue. If you feel at all under the weather, please do not come to class. If you are in class and coughing or sneezing extensively, I will ask you to wear a mask to protect myself and the other students, or to leave class. Please be respectful of the choices of those around you, whether they choose to mask and socially distance or not.

**Academic Misconduct**

Academic Misconduct in any form is in violation of the University of Connecticut *Student Code* and will not be tolerated. This includes but is not limited to: copying or sharing answers on tests, using “cheat sheets” or notes during the exam (except as authorized), plagiarism (including using AI tools for writing), and having someone else do your academic work. Depending on the act, a student could receive an F grade on the test/assignment, F grade for the course, and could be suspended or expelled from the University.

**Students with Disabilities**

**The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. Detailed information regarding the accommodations process is available on their website at** [**www.csd.uconn.edu**](http://www.csd.uconn.edu)**. If you require an accommodation for test-taking, such as double time, note that you will have to take the exams at CSD, and that you must schedule to take these at the same time as the rest of the class, at least a week in advance (per CSD policy).**

**Note on taking this class during the pandemic**

Although it is now somewhat on the wane, the pandemic has been an extraordinarily difficult time for all of us. *The only way we will get through this time is if we all take care of one another.* As your professor I care about your success in this class, and also about your personal health and well-being, which go hand in hand. *If you are struggling with your physical or mental health, or need help for any reason, please do not hesitate to reach out to me.* While stress is almost always a part of the college experience, it can be especially acute right now. At the end of the syllabus I’ve included several resources that might help, which I encourage you to peruse.

My goal this semester is to teach this class in person, and as normally as possible. In the unfortunate event that myself or a large fraction of the class is infected later in the semester, we may have to switch back to an online modality. Online teaching is not my preferred modality, and I know that for many of you it is not your preferred way of learning. I urge us all to be patient with each other and to treat any difficulties we may experience with understanding and compassion.

Please note that ***attendance in this class is strongly encouraged****.* I think you will get more out of the class by coming to lecture and having a chance to ask questions. Besides having the opportunity to participate fully, you will likely find that the routine is good for you given all of the other disorder in our lives. In case you are unable to attend lecture due to an illness, please reach out to me after the lecture and I will provide a recording of the class.

Even with everything that is going on, I firmly believe that together we can make this class a positive experience for everyone. I look forward to a great semester studying some interesting economics with you!

**Mental Health**

Each of us responds to these turbulent times in our own way. As school, work, and family life changes, worries can even threaten to take over our lives. Here are some common Mental Health Related Reactions:

· Anxiety, worry, or panic · Feeling overwhelmed or helpless · Social withdrawal beyond practicing safe social distancing · Sadness and loneliness · Difficulty concentrating · Increased boredom and loss of interest in daily life activities · Frustration, anger, or irritability · Increased sensitivity to physical sensations · Hypervigilance to health for ourselves and others

*If you are struggling, please know that you are not alone.* Things will, eventually, get better. There are actions you can take and resources that are available to you.

**Healthy Ways to Cope with Stress**

* Know what to do if you are sick and are concerned about COVID-19. Contact a health professional before you start any self-treatment for COVID-19.
* Know where and how to get treatment and other support services and resources, including counseling or therapy (in person or through telehealth services).
* Take care of your emotional health. Taking care of your emotional health will help you think clearly and react to the urgent needs to protect yourself and your family.
* Take breaks from watching, reading, or listening to news stories, including those on social media. Hearing about the pandemic repeatedly can be upsetting.
* Take care of your body.
  + Take deep breaths, stretch, or meditate.
  + Try to eat healthy, well-balanced meals.
  + Exercise regularly.
  + Get plenty of sleep.
  + Avoid excessive alcohol and drug use.
* Make time to unwind. Try to do some other activities you enjoy.
* Connect with others. Talk with people you trust about your concerns and how you are feeling.
* Connect with your community- or faith-based organizations. While social distancing measures are in place, consider connecting online, through social media, or by phone or mail.

**If you are Experiencing Distress**

Students who feel they may benefit from speaking with a mental health professional can find support and resources through the Student Health and Wellness-Mental Health (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.

SHaW's mental health services has moved to exclusively telehealth (online) or phone platforms for providing services to support students. In order to access services, students must call 860-486-4705.

**Mental health services are included as part of the university’s student health insurance plan** and also partially funded through university fees. If you do not have UConn’s student health insurance plan, most major insurance plans are also accepted. Students can visit the Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor, or contact the office at (860) 486-4705, or https://studenthealth.uconn.edu/ for services or questions.