

Economics 5960 Psychology and Economics

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Lecture Location: Building BEH S 115
Lecture Days/Time: MW 1:25 PM – 2:45 PM

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Course Description: The neoclassical framework in economics provides a coherent and internally consistent body of theory that offers rigorous, parsimonious, and falsifiable models of human behavior. Augmented with auxiliary assumptions, it is flexible enough to analyze a wide range of phenomena and its qualitative predictions often accord with one's gut feeling about many phenomena. In actual practice, the neoclassical framework includes, but is not restricted exclusively to, consistent preferences, subjective expected utility, Bayes' rule to update probabilities, self-regarding preferences, emotionless deliberation, exponential discounting, unlimited cognitive abilities, unlimited attention, unlimited willpower, and frame and context independence of preferences. Neoclassical economics is also typically underpinned by optimization based solution methods and an equilibrium approach.

Neoclassical economics is a logically consistent and parsimonious framework that is based on a relatively small set of core assumptions, and it offers clear, testable, predictions. However, extensive empirical evidence that has accumulated over the last few decades reveals human behavior that is difficult to reconcile within the typical neoclassical models.

There has been a parallel growth in rigorous theoretical models that explain better the emerging stylized facts on human behavior. These models have borrowed insights from psychology, sociology, anthropology, neuroscience, and evolutionary biology. Yet, these models maintain a distinct economic identity in terms of their approach, rigor, and parsimony. Collectively, these models form the subject matter of *behavioral economics*, which is possibly the fastest growing and most promising area in economics.

Any falsifiable theory that replaces/modifies any of the core features of neoclassical economics, by alternatives that have a better empirical foundation in human behavior is a potential member of the class of behavioral economic theories, if it can pass stringent empirical tests.

Consider the following quote from Gintis (2009, p. xvi) that nicely captures the problem that we face in the current teaching of economics and, indeed, in the approach to economics: "Economic theory has been particularly compromised by its neglect of the facts concerning human behavior... I happened to be reading a popular introductory graduate text on quantum mechanics, as well as a leading graduate text in microeconomics. The physics text began with the anomaly of blackbody radiation,...The text continued, page after page, with new anomalies...and new, partially successful models explaining the anomalies. In about 1925, this culminated with Heisenberg's wave mechanics and Schrödinger's equation, which fully unified the field. By contrast, the microeconomics text, despite its beauty, did not contain a single fact in the whole thousand-page volume. Rather the authors built economic theory in axiomatic fashion, making assumptions on the basis of their intuitive plausibility, their incorporation of the "stylized facts" of everyday life, or their appeal to the principles of rational thought...We will see that empirical evidence challenges some of the core assumptions in classical game theory and neoclassical economics."

In behavioral economics, and in this course, we are interested in models that explain well the evidence from the lab and the field. In particular, we subscribe to the view that economic models must pass stringent empirical tests. The job of economic theory is to offer an ever improving sequence of models that can explain everything that the refuted models could explain and in addition some new phenomena that the older models could not. I do not subscribe to the view that economic models should not be subject to stringent tests, or that they exist solely to form some intuition about a phenomenon, or tell a fable or a story, or worse, that they are to be pursued for reasons of aesthetic beauty alone.

The subject matter of behavioral economics is vast in scope. Indeed, it is even more ambitious in scope as compared to the study of neoclassical economics. One can conceivably teach an entire year long course on the subject. So you would appreciate that a semester will just very barely, scratch the tip of the iceberg. My hope is that I can get you sufficiently excited about the subject so that you can continue to follow developments in this exciting area, which I firmly believe to be the future of economics.

This Course is:

not about the philosophy or methodology of economics

not about non-psychological models of bounded rationality

not about experimental economics as such

not an alternative to mainstream economics, at least as it stands now.

Textbook: None. I will not follow any book because it's hard to do so for an undergraduate course. Instead, I will teach from my personal notes. Other times, I will point you to journal articles, when necessary. Note that on many occasions, I will ask you to read these articles.

Course Materials: From time to time some course materials (mostly my slides) will be posted on Canvas. It's your responsibility to check Canvas accordingly. I will, when I can, alert you to such postings.

Course Objectives: There are many. But, the primary motive is to enable you to think creatively about economics problems; to tempt you to question the underlying foundational assumptions of standard economic theories. If you wish to talk about your research paper (due at the end of the semester), appointment-based office hours are often fine for this. I enjoy talking to students about their ideas for research.

Behavioral Decision Theory and Behavioral Game Theory: Just so we know this important difference, Behavioral economics can be broadly divided into behavioral decision theory and behavioral game theory. Each subfield differs from its mainstream counterpart by paying particular attention to the psychological realism of behavioral assumptions and their consistency with empirical evidence.

Behavioral decision theory includes topics such as present-bias and time-inconsistency in intertemporal choice; reference-dependence and loss aversion in choice under certainty or uncertainty; social preferences such as altruism, envy, spite, fairness, or reciprocity; identity, behavioral contract theory, and incentives; and heuristics and biases in probabilistic judgment, various psychological biases.

Behavioral game theory includes "behavioral decisions in games", but the theory has so far followed the "divide and conquer" strategy of focusing on topics unique to games. It covers learning; models of bargaining; and models of strategic thinking in initial responses to games.

(Tentative) Content Overview: We will discuss some of the most important theoretical and experimental contributions in a given topic area.

The following list of topics is tentative.

- Perspectives on experimental methodology and basic terminologies
- Other-regarding preferences (five games, distributional preferences, inequality aversion, maximin preferences, etc)
- Other-regarding preferences (intentions, hybrid models)
- Other-regarding preferences (behavioral contract theory, moral hazard, adverse selection, guilt aversion)
- Other-regarding preferences (self-image, examples from dictator games, identity, status)
- Incentives (intrinsic and extrinsic motivations, applications)
- Classical Decision Theory (expected utility theory (EUT)), violations of EUT
- Prospect Theory (endowment effect, loss aversion, reference point)
- Applications of expectation based reference point (taxi drivers, contracts as reference points)
- Time Preferences (Exponential Discounting Utility model, hyperbolic model, procrastination)
- Applications of procrastination and material incentives
- Coordination games (stag-hunt, minimum effort games, BOS, market entry games, Braess paradox, disapproval)
- Bargaining games (Nash bargaining, information asymmetry, multi period ultimatum games)
- Public good games (punishment, endogenous groups, other variations)
- Models incorporating lack of Perfect Rationality (beauty contest games, QRE, Level- k model, applications)
- Deception/Lying (size, biases, other variations)

Note that each class will be formatted after a roundtable discussion style since such classes typically have very few students enrolled. So, be prepared to contribute to each class.

Evaluation Methods and Criteria:

The following outlines the evaluation schemes that will be used in the course. The weight assigned to each scheme *may* change at the discretion of the professor within the first two weeks of the class.

Midterm examination 1 (February 6): 25% weight

Midterm examination 2 (March 20): 25% weight

Research paper (hard copy due in my office on April 22 by 4:30 PM (MST)): 25% weight

In-class presentation of the research paper: 15% weight

Class attendance/participation during the presentation of papers by your classmates: 10% weight

The dates for class presentations will be announced before March 20. All exams are in-class, closed notes and books, and comprehensive.

Research Paper:

The main objective of this course is to offer you ample opportunities so that you can develop your skills for becoming “someone” who asks good questions. This is a valuable skill to develop regardless of whether you want to become an academician or a practitioner. The research paper you are supposed to write may build on a topic that we have covered in the class or may bridge across topics or, it may involve a topic that we have not covered in the class. Note that for the last case, you need to convince me why doing so is important. Your main job is to “sell” your idea to the professor and your classmates (that is, your potential reader) via a research proposal.

A good proposal:

- ✿ is between 5 and 10 pages,
- ✿ is broken into 6 coherent sections, such as (for example) “Introduction”, “Related Literature”, “Proposed Experiment (experimental design)”, “Theory”, “Predictions/Hypotheses”, and “Conclusion”,
- ✿ has a title page with the author’s name, title, and an abstract of <100 words that summarizes the proposal,
- ✿ properly surveys related literature to show that (a) your idea hasn’t been done, and (b) your idea has spotted an interesting hole in the literature,
- ✿ provides *in very clear detail* what exactly you propose to work on,
- ✿ has a list of predictions/hypotheses about what you expect to find,
- ✿ and provides *in very clear detail* what resources you will need (money, subjects, computer lab, etc.).
- ✿ *Examples of potentially relevant topics:*

Addiction, anonymity, attention, auctions, auditing, bargaining, beauty, biases, bounded rationality, bracketing, bubbles, business, children, communication, confidence, confirmatory bias, contract theory, cooperation, coordination, corruption, crime, deception (in or outside the lab), decision making, deductive reasoning, development, discrimination, double auctions, emotions (including anger, anxiety, disappointment, elation, envy, fear, guilt, meta-guilt, irritation, joy, regret, shame, surprise) entrepreneurial discovery, evolution, equity premium puzzle, ethnicity, evolution, experimental business research, fairness, feelings, field experiments, finance, fines, framing, gender, government failure, group decisions, happiness, health, hedonics, herding, heuristics, history of behavioral/experimental economics, hyperbolic discounting, identity, imitation, implementation, incentives, inference, informational cascades, internet, intertemporal choice, judgment, law, learning, liberty, loss aversion, lying, macro, marketing, markets, matching, mechanism design, memory, mental accounting, money illusion, mood, multicriteria games, neuroeconomics, networks, optimism, organizations, paternalism, peer group effects, pessimism, policy, political science, political stock markets, preference reversals, procedural rationality, procrastination, promises, prospect theory, psychological games, public choice, public goods, punishment, quantal response, reciprocity, reference dependence, reputation, revealed preference, revenge, rewards, sabotage, savings, script analysis, signaling, shirking, social distance, social norms, social preferences, social respect, somatic markers, speculation, statistics, status, teams, temptation, threats, time consistency, time preference, unawareness, visceral factors, voting, wages, welfare...

All students must write a research proposal, which is due on April 22. You must send me (at subhasish.dugar@economics.utah.edu) an electronic copy of the paper by 4:30 PM (MST) on April 22. You must also submit a hard copy to my office by 4:30 PM (MST) on April 22. This is equivalent to a final exam. Meet with me to hatch and sharpen an idea. These are the dates by which I expect you to talk to me about your idea:

February 4: Early consultation about what area(s) you are looking at for a potential topic for your paper

March 18: By this time, you should have identified a topic and will have started working on the experimental design, theory, etc.

April 3: By this time, you should be mostly done with writing the paper.

Note that within the next three weeks of classes (from April 3 onwards) you will have to present your paper. Before each of these deadlines, I’ll remind you in the class to set up an office appointment with me to discuss your topic along the lines suggested above.

Students who are unable to submit the paper by April 22nd will receive zero points. There will be no late submissions. If you fail to submit the paper due to being sick, then you must obtain my permission. You must supply documented evidence (medical prescription) of your illness.

Research Paper Presentation:

Last few weeks of classes (depending on how many students are enrolled in the course) will open with student presentations. Each student will present his/her paper in the class by April 22nd so that they have some time to incorporate into their paper those comments that they may come across during their paper presentation. Each presentation should account for 40 minutes of the class time (may change later). The presentation dates will be decided in the class with consultation with the students and will be made known to each student well in advance.

The student presentation should:

- ✱ be well-prepared and organized with PowerPoint slides (note that the rule of thumb in economics is that each slide takes on average 3 minutes)
- ✱ tell the reader why studying that topic is important
- ✱ summarize the existing literature and highlight the contributions of the paper,
- ✱ summarize any theories and models provided by the paper,
- ✱ describe the experimental design (treatments, data points, etc.)
- ✱ include predictions (if there is a model) or hypotheses to be tested
- ✱ and include a conclusion section discussing the policy implications of the expected results

Students who are unable to present their paper will receive zero points. There will be no late presentations. If you miss the presentation due to being sick, then you must obtain my permission. You must supply documented evidence (medical prescription) of your illness.

As a guide to determining standing, these letter grade equivalences will apply:

A ≥ 93%
 93% > A ≥ 90%
 90% > B+ ≥ 87%
 87% > B ≥ 83%
 83% > B- ≥ 80%
 80% > C+ ≥ 77%
 77% > C ≥ 73%
 73% > C- ≥ 70%
 70% > D+ ≥ 65%
 65% > D ≥ 60%
 60% > D- ≥ 50%
 50% > E

If you have questions regarding grading of an exam question, you must ask within **two weeks** from the day the graded exam is handed back in the class. No exceptions to this rule will be entertained.

Notes:

- **Academic Code of Conduct Statement**
 Cheating on exams and other forms of academic dishonesty may lead to expulsion from the class, failure of the class, or more severe penalties such as dismissal from the University. In accordance with University regulations. For related University policy, please refer to this link: <http://regulations.utah.edu/academics/6-400.php> (Section I). If you are caught cheating in this class, I must send a letter to your dean about that, and the letter will be put in your permanent University file. I punish cheating quite severely.
- **The Americans with Disabilities Act (ADA) Statement**

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 801-581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

- **Addressing Sexual Misconduct Statement**

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

- **Wellness Statement**

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.

- **Student Names and Personal Pronouns Statement**

Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

- **Non-Contract Note**

This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.