

Behavioral and Experimental Economics

Fall semester 2021

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General information about the course:

Experimental economics is the branch of economics concerned with testing economic theory using controlled experiments. This methodology was introduced in the 1960s by Vernon Smith, who used it to study behavior in markets. Beginning in the 1970s, experimental methods were increasingly used by psychologists such as Kahneman and Tversky to point out behavior at odds with the standard economic model, and this work came to be known as behavioral economics.

The first half of this course will focus on the **fundamentals** of behavioral and experimental economics. You will learn about experiments on belief formation (focusing on Bayesian reasoning), preferences (focusing on attitudes to risk), and strategic behavior.

The second half of the course will focus on **real-life applications**. Here, you will learn about experiments on political economy (including studies of corruption and democracy), group identity, discrimination, and other topics, as time allows.

For each topic we study, we will start with a broad overview of the existing literature. We will then pick one recent research paper and explore it in detail.

Course goals and learning objectives:

The course is designed to:

1. Give you a good sense of where the field is today;
2. Teach you how to read research papers;
3. Challenge you to come up with your own research ideas.

To get the most out of the lectures, you will be asked to read research papers. While there is no assigned textbook for this course, you should expect to carefully read approximately 1 paper a week. You should also be prepared to read such papers independently. (If you are unsure whether this course is for you, try to read to this paper from the beginning to the end and see if you understand it: <http://piotr-eydokimov.com/beliefs.pdf>)

Who can benefit from this course?

This course is designed for students that are interested in economics *as a science*. Because the course requires a certain level of intellectual maturity, it is restricted to third and fourth year economics students. It is ideally suited for those who are considering obtaining an economics PhD.

At a minimum, you should know how to interpret the results of a simple linear regression. You should also have completed courses in intermediate microeconomics, calculus, and statistics.

Teaching language: English

Evaluation:

Evaluation of this course consists of two written assignments that you will submit in the middle and at the end of the course.

- (1) Midterm assignment (30% of the grade).
- (2) Final assignment (50% of the grade).
- (3) Participation in a laboratory experiment (10% of the grade).
- (4) Classroom participation (10% of the grade)

Written assignments:

Midterm assignment:

The midterm assignment is a literature review of a topic from behavioral or experimental economics not discussed in class, as well as a discussion of a recent paper on this topic. The paper should come from the journal *Experimental Economics* and be published in the last five years.

About 40% of the assignment should briefly discuss the most important papers (in your view) on the topic you select. The discussion should be structured logically so that the connections between the papers are clearly seen. Start with writing about the earliest papers, and move to discussing later developments by pointing out what newer papers have done that the earlier papers did not do.

The second half of the assignment should discuss the new research paper you found. You should carefully describe the experimental design and why the specific design choices were made by the authors. State clearly the hypotheses of the experiment. Describe the results. Are the hypotheses confirmed or not? If not, how do the researchers explain their findings?

Finally, the assignment should conclude with either (i) a criticism of the paper or (ii) a suggestion of a new experiment that builds on the paper you found. The criticism can be concerned with either the experimental design or the authors' interpretation of their findings. It should be more thoughtful than "the study was conducted in the laboratory with a student sample and its findings might not apply to the real world." More thought-out responses will receive better grades.

Final assignment:

The final assignment is a proposal for your own experiment, possibly with a presentation of some preliminary results based on the data you collected. This assignment should have the following structure:

- An abstract, summarizing the rest of the document in one paragraph;
- An introduction (2-3 paragraphs), describing the motivation for the experiment;
- A literature review/background section (min. 2 paragraphs), describing what previous studies have been done on the topic you are planning to investigate and what makes your proposed experiment different;
- A detailed description of the experiment, including the treatments and hypotheses (predictions)
- (Optional, but highly recommended): A results section, discussing the preliminary data you collected.

Quality is more important than quantity for the writing part of the final assignment. I am not going to grade you based on how many pages you write, but based on how clear and interesting the description

of your experiment is.

The experiment can be based on any paper that we discussed in class (it can be an extension of some existing experiments, investigating related questions), but it does not have to be. It can also be a completely new experiment investigating any issue related to economic behavior that you find interesting.

It is not required that you collect data for your experiment, but if the experiment is a simple survey or something you can easily implement online, data collection is highly recommended.

Classroom Participation:

Because the class will be conducted online, I will keep a record of your participation through Zoom. If you ask a question or make a comment, please type the question or comment into the chat. The number of questions or comments you make throughout the semester will be counted, as well as the quality of the questions or comments. The more questions or comments you make, the more participation credit you will get for the class.

Textbooks:

There is no required textbook for this course. Instead, you will read research papers and miscellaneous other texts. Some of these are included in the outline below.

Course outline:

(The outline is approximate and may change during the term.)

Beliefs

Topics:

How people form beliefs on the basis of uncertain information, deviations from Bayesian reasoning and other anomalies

Readings:

- Chapter 30 of MGSB
- Grether, David M. "Bayes rule as a descriptive model: The representativeness heuristic." *The Quarterly journal of economics* 95.3 (1980): 537-557.
- **Evdokimov, Piotr, and Umberto Garfagnini. "Higher-Order Learning." *Working paper***
- Friedman, Daniel. "Monty Hall's three doors: Construction and deconstruction of a choice anomaly." *The American Economic Review* 88.4 (1998): 933-946.
- Miller, Joshua B., and Adam Sanjurjo. 2019. "A Bridge from Monty Hall to the Hot Hand: The Principle of Restricted Choice." *Journal of Economic Perspectives*, 33 (3): 144-62.

Attitudes to risk

Topics:

How people make risky decisions, deviations from the standard model and issues with the behavioral approach

Readings:

- Kahneman, Daniel, and Amos Tversky. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47.2 (1979): 263-292.
- Thaler, Richard H., et al. "The effect of myopia and loss aversion on risk taking: An experimental test." *The Quarterly Journal of Economics* 112.2 (1997): 647-661.

- Eijkelenboom, Gilbert G., Ingrid Rohde, and Alexander Vostroknutov. "The impact of the level of responsibility on choices under risk: the role of blame." *Experimental Economics* 22.4 (2019): 794-814.

Game theory

Topics:

How people strategize in situations where behavior of others matters, how experiments can be used to study altruism and trust

Readings:

- Goeree, Jacob K., and Charles A. Holt. "Ten little treasures of game theory and ten intuitive contradictions." *American Economic Review* 91.5 (2001): 1402-1422.
- **Evdokimov, Piotr, and Aldo Rustichini. "Forward induction: thinking and behavior." *Journal of Economic Behavior & Organization* 128 (2016): 195-208.**
- Dana, Jason, Roberto A. Weber, and Jason Xi Kuang. "Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness." *Economic Theory* 33.1 (2007): 67-80.
- Hoffman, Elizabeth, et al. "Preferences, property rights, and anonymity in bargaining games." *Games and Economic Behavior* 7.3 (1994): 346-380.
- Charness, Gary, and Martin Dufwenberg. "Promises and partnership." *Econometrica* 74.6 (2006): 1579-1601

Political Economy

Topics:

TBA

Readings:

- Palfrey, Thomas R. "Laboratory experiments in political economy." *Annual Review of Political Science* 12 (2009): 379-388.
- **Dal Bó, Pedro, Andrew Foster, and Louis Putterman. "Institutions and behavior: Experimental evidence on the effects of democracy." *American Economic Review* 100.5 (2010): 2205-29.**
- Di Tella, Rafael, et al. "Conveniently upset: Avoiding altruism by distorting beliefs about others' altruism." *American Economic Review* 105.11 (2015): 3416-42.

Group Identity

Topics:

TBA

Readings:

- Charness, Gary, and Yan Chen. "Social identity, group behavior, and teams." *Annual Review of Economics* 12 (2020): 691-713.

- Robbett, Andrea, and Peter Hans Matthews. "Partisan bias and expressive voting." *Journal of Public Economics* 157 (2018): 107-120.
- **Kahan, Dan M.** "Ideology, motivated reasoning, and cognitive reflection: An experimental study." *Judgment and Decision making* 8 (2012): 407-24.
- **Charness, Gary, Michael Naef, and Alessandro Sontuoso.** "Opportunistic conformism." *Journal of Economic Theory* 180 (2019): 100-134.