# **Syllabus**

**Course title** BEHAVIORAL ECONOMICS AND BELIEFS

**Instructor** Marc Kaufmann

Email kaufmannm@ceu.edu

Office by appointment

Credits 2 US credits (4 ECTS credits)

Module (in which the course is offered)

**Term** Winter 2021-2022

Course level Master's

**Prerequisites** An advanced course in microeconomic theory

**Course drop** 

# 1. COURSE DESCRIPTION

#### Content.

This course will explore ways to integrate insights from psychology into economics, formalizing these insights by extending existing economic models, and reviewing the evidence in the lab or field for these models. In terms of methodology, the course focuses on formal models and how to estimate them: how to turn evidence from psychology into formal models, deriving their implications, and measuring these biases and implications in economic settings. In terms of content, the course focuses on beliefs: how to measure people's beliefs; how people update their beliefs; and situations where people may derive direct utility from their beliefs, not just from the actions they take based on those beliefs. Moreover, the beliefs we study include beliefs over the outside world as well as about one's own past and future behavior. How dangerous is smoking? How much time did I spend on YouTube last week? How much will I work out next week?

#### Relevance.

The course covers the same topics and questions as *Psychology and Economics of Beliefs,* but moves the focus away from the formal analysis and moves it towards applications of these models and estimating them in the lab (and, to a lesser extent, the field). Both in terms of formal analysis and statistical/econometric sophistication, the course is less stringent and rigorous, which frees up time to cover more applications and to explore richer settings (while being aware that the results are much more tentative). **As such the course is suited to students interested in applications who do not plan on doing research in economics.** 

### 2. LEARNING OUTCOMES

**Key outcomes.** By the end of the course, students will





- learn how to extend the classical economic framework by formally modeling insights from psychology, especially regarding beliefs;
- learn how these models affect decisions across various economic settings, and how to test them and measure their impact;
- be exposed to (a small subset of) the frontier of research on beliefs in behavioral economics; and
- learn how to run simple experiments to measure beliefs and their impact

# 3. READING LIST

The following list will be updated as the course progresses.

#### Introduction

- This syllabus
- DellaVigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." Journal of Economic Literature 47(2): 315-372.

#### **Statistical Biases**

- Tversky, Amos, and Derek Koehler, (1994): "Support Theory: A Nonextensional Representation of Subjective Probability," Psychological Review, 101(4): 547-567.
- Madarasz, Kristof. (2012): "Information Projection: Model and Applications," Review of Economic Studies, 79 (3): 961-985.
- Benjamin, D., M. Rabin, and C. Raymond. (2015): "A Model of Non-Belief in the Law of Large Numbers," forthcoming, Journal of the European Economics Association.

#### **Measurement of Beliefs**

- Manski, Charles F. (2004), "Measuring Expectations." Econometrica72 (5): 1329–76. https://doi.org/10.1111/j.1468-0262.2004.00537.x.
- Delavande, Adeline, and Susann Rohwedder. 2008. "Eliciting Subjective Probabilities in Internet Surveys." Public Opinion Quarterly72 (5): 866–91. https://doi.org/10.1093/pog/nfn062.
- Prelec, Dražen (2004), "A Bayesian Truth Serum for Subjective Data." Science306 (5695): 462–66. https://doi.org/10.1126/science.1102081

#### **Beliefs and Education**

- Jensen, Robert (2010), "The (Perceived) Returns to Education and the Demand for Schooling." Quarterly Journal of Economics125 (2): 515–48. https://doi.org/10.1162/gjec.2010.125.2.515.
- Zafar, Basit (2011), "How Do CollegeStudents Form Expectations?" Journal of Labor Economics29 (2): 301–48. https://doi.org/10.1086/658091



- Arcidiacono, Peter, V. Joseph Hotz, and Songman Kang (2012), "Modeling College Major Choices Using Elicited Measures of Expectations and Counterfactuals." Journal of Econometrics166 (1): 3–16. https://doi.org/10.1016/j.jeconom.2011.06.002.
- Matthew Wiswall and Basit Zafar, "Determinants of College Major Choice: Identification Using an Information Experiment," *The Review of Economic Studies* 82, no. 2 (April 1, 2015): 791–824, accessed February 12, 2022, https://doi.org/10.1093/restud/rdu044.

#### **Self-Beliefs**

- O'Donoghue, Ted, and Matthew Rabin. 1999. "Doing It Now or Later." The American Economic Review 89 (1): 103–24.
- Loewenstein, G., O'Donoghue, T., & Rabin, M. (2003). Projection bias in predicting future utility. *the Quarterly Journal of economics*, *118*(4), 1209-1248.

#### Others' Beliefs

• Dana, J., R. Weber, and J. Kuang. (2007): "Exploiting moral wriggle room: experiments demonstrating an illusory preference for fairness." Economic Theory, 33, 67–80.

#### **Social Inference**

• Eyster, Erik, and Matthew Rabin. (2005): "Cursed Equilibrium." Econometrica, 73(5): 1623-1672.

# 4. TEACHING METHOD AND LEARNING ACTIVITIES

The course will involve a mix of lectures, in-class problem solving based on problem sets:

- 80% lectures by the instructor
- 20% in-class problem solving based on problem sets

# 5. ASSESSMENT

Assessment may change by Winter 2022.

- 1 Problem Sets/Exercises (60 points): consisting of a mixture of exercises, writing research ideas:
  - Research ideas (20 points): 4 ideas per week for weeks 1 through 5
  - Exercises (40 points): 8 points per week for weeks 1 through 5
- **2 Design Experiment to Estimate/Test/Measure Beliefs (50 points):** You will have to come up with the design of an experiment (in the lab or field, which can consist of a survey) for measuring some question surrounding beliefs.



This adds up to 110 points, which means that you can lose 10 points without it affecting your grade: a final score above 100 will be treated as equivalent to a 100.

# **6. TECHNICAL REQUIREMENTS**

None.

# 7. TOPIC OUTLINE AND SCHEDULE

Session	Topics	Readings
1-2	Introduction and Measurement of Beliefs	
3-4	Self-Beliefs: Present Bias	
5-6	Self-Beliefs: Projection Bias	
7-8	Utility from Beliefs: Reference Dependence	
9-10	Motivated Beliefs	
11-12	Beliefs in Strategic Settings	
Also	How to run experiments; more measurement of beliefs	

# 8. SHORT BIO OF THE INSTRUCTORS

**Marc Kaufmann** is Assistant Professor at CEU Department of Economics and Business. He graduated from Harvard University with a PhD in Economics in 2017. He also holds MMath from the University of Cambridge. Prof. Kaufmann does applied theory in what will soon be what was used to be known as behavioral economics. His current research projects center around projection bias and narrow bracketing, including experimentally measuring these biases, as well as exploring how they affect work decisions.

