



## PhD Course

# Behavioral & Experimental Economics

- Dates:** (four) Friday sessions:  
21 October 2022, 11 November 2022, 16 December 2022, 28 April 2023.  
The session timeline allows participants to develop and run their experiments with discussions in class.
- Time:** 08:30–10:00, 10:15–12:30, 13:30–15:00
- Place:** Universität Hamburg (MO18 room 0005.1/or via Zoom if required)
- Course Instructor:** Prof. Dr. Markus Nöth, Prof. Dr. Guido Voigt (both Universität Hamburg)
- Course Value:** 2 SWS/5 LP
- Teaching language:** English
- Registration:** via STiNE, please. Contact for questions [bettina.kourieh@uni-hamburg.de](mailto:bettina.kourieh@uni-hamburg.de)
- Objectives:** The main goal of this course is to introduce the design and implementation of both laboratory and field experiments in various fields of Economics and Business Administration. PhD students who have some experience with or who consider setting up an experiment are welcome to participate in this course.
- First, we will identify different research questions for a laboratory or a field experiment. We start with discussing critical theory assumptions. We then show how research hypotheses can be inferred from behavioral models and how these hypotheses may be tested in lab or field studies.
- Second, participants will critically discuss an experimental paper (either provided by us or self-selected) that is instructive for their own research field.
- Third, participants have the opportunity to develop and discuss an experimental design and may conduct a pilot experiment that is run in class. We introduce basic statistics along with a discussion how they relate to the experimental design. Alternatively, for participants who do not plan to conduct own experiments, a second paper will be reviewed.

Participants have the option to take a research ethics training (<https://about.citiprogram.org/en/homepage>) that becomes increasingly important to conduct research projects with colleagues from the United States. All students will learn the basic requirements of a human subjects committee.

- Some Topics:**
- Identify a suitable research question for an experiment
  - Ethical and scientific standards: historical and scientific reasons, consent requirements, human subjects committee, special requirements (children, elderly people, inmates, ...), data collection and evaluation
  - Individual and group experiments in the laboratory
  - Surveys and internet experiments
  - Field experiments in cooperation with a company

**Prerequisites:** Basic background in microeconomics, game theory and statistics.

- Student evaluation:**
- Critical discussion of experimental papers,
  - Online test,
  - Optional but encouraged: experiment design presentation (extended summary on economic question, relevant literature, hypotheses, design: presentation with max. 10 slides or max. five pages extended abstract); running a pilot experiment

### Schedule (tentative)

1 <sup>st</sup> Session	Introduction to the field Game theoretic models, critical assumptions, behavioral models and research hypothesis Laboratory Experiments	Katok 18
2 <sup>nd</sup> Session	Presentation and discussion of assigned papers Statistics & design choices IRB, field experiments	Hyndman, K. and Embrey, M. (2018)
3 <sup>rd</sup> Session	Presentation of research (problem description, research hypothesis, experimental design) Visit of experimental laboratory (z-Tree, eye tracking, etc.)	
4 <sup>th</sup> Session	Presentation of pilot studies (pls. note: pilot studies need to be scheduled independently by participants)	

**Recommended Texts:**Suggested literature in preparation for the course:

Katok, E. (2018) Designing and Conducting Laboratory Experiments, pages: 1-33 in Donohue, K.; Katok, E.; Leider, S. (Hg.). The handbook of behavioral operations. John Wiley & Sons, 2018. (online available)

Hyndman, K. and Embrey, M. (2018) Econometrics for Experiments, pages: 35-88 in Donohue, K.; Katok, E.; Leider, S. (Hg.). The handbook of behavioral operations. John Wiley & Sons, 2018. (online available)

Others:

Baum, C.F. (2006) An introduction to modern econometrics using Stata. Stata press

Camerer, C (2003) Behavioral Game Theory, Princeton University Press

Holt, C. (2019), Markets, Games, and Strategic Behavior: A First Course in Experimental Economics, 2nd edition, Princeton University Press

Kagel, J. and A. Roth (1995) Handbook of Experimental Economics, Princeton University Press

Sheskin, D. J. (2011) Handbook of parametric and nonparametric statistical procedures. 5. ed. CRC Press

Further material (e.g., papers to be presented etc.) will be distributed once we know who will be participating to accommodate the various backgrounds.