

PhD Course

Behavioral & Experimental Economics

Dates: The course takes place on four Fridays. Sessions are such that participants have sufficient time to develop and run their experiments:

13th November 2020, 11th December 2020,

22nd January 2021, and 19th March 2021.

Time: 09:00 - 16:00 h

Place: Universität Hamburg (more details follow)

Course Instructor: Prof. Dr. Markus Nöth and Prof. Dr. Guido Voigt (both UHH)

Course Value: 2 SWS/5 LP

Teaching language: English

Registration: <u>guido.voigt@uni-hamburg.de</u> (First come, first-served)

Course Overview: 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 to set 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 will develop an experimental design and 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 (<u>https://about.citiprogram.org/en/homepage/</u>) that becomes increasingly important to conduct research projects with colleagues from the Unites States. All students will learn the basic requirements of a human subjects committee.

- **Course Contents**: 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.
- **Assessment:** Critical discussion of an experimental paper
 - 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):

Day	Topics	Suggested Readings
1 st Session	Introduction to the field	Katok (2018)
	Game theoretic models, critical assumptions, Behavioral Models and Research Hypothesis	
	Laboratory Experiments	
2 nd Session	Presentation and discussion of assigned papers.	Hyndman, K. and
	Statistics & Design Choices	Embrey, M. (2018)
	IRB, Field-Experiments	
3 rd Session	Presentation of research (Problem Description, Research Hy- pothesis, Experimental Design)	
	Visit of Experimentallabor (z-Tree, Eye-Tracking, etc.)	
4 th Session	Presentation of pilot studies (Note: Pilot studies need to be scheduled independently by participants)	

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Recommended Texts:

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)

Other useful resources:

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.

Other material (e.g., papers to be presented etc.) will be distributed once we know who participates.