



PhD Course

## Behavioral & Experimental Economics

The course takes place on four Fridays in the summer term 2018:

6.4. / 20.4. / 18.5. / 6.7

10-12.30h and 13.30-16h

Room tbd

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

**Course Value:** 2 SWS/4 LP

### Course Overview & Contents:

The course discusses the basic steps of performing behavioral research. We start with discussing critical assumptions of game theoretic models. We then show how research hypotheses can be inferred from behavioral models and how these hypotheses may be tested in lab studies. Critical design factors of laboratory experiments and the most commonly applied statistical tests will be presented.

We will further visit the Lab at the UHH while discussing options (e.g. eye-tracking) and limits (e.g. subject pool, size of the lab) for conducting lab experiments at UHH. The course also provides an overview of commonly applied software tools that are used for behavioral modelling (Maple), software for computerized experiments (z-Tree), and statistical analysis (Stata). Ethical aspects of conducting laboratory experiments underpin the theoretical/fundamental part of this course.

Based on these theoretical foundations, participants are asked to design an experiment. The presentations will be the basis for passing/failing the course. The topic of the experiment is open. We may also suggest a topic. If this is the case, please send your research interest along with the registration.

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

**Assessment:** Assessment will be based on active participation. Grading for students of University of Hamburg will be pass/fail.

**Teaching Language:** English

**Registration:** [stefanie.nonnsen@uni-hamburg.de](mailto:stefanie.nonnsen@uni-hamburg.de) (First come, first-served)

**Schedule (tentative):**

Day	Topics	Suggested Readings
Friday 6 <sup>th</sup> April	Game theoretic models, critical assumptions, Behavioral Models and Research Hypothesis  Laboratory Experiments  Experimental Design	Katok 2012
Friday, 20 <sup>th</sup> April	Statistical methods: non-parametric tests and random and fixed effects regression  z-Tree Eye-Tracking	Baum 2006, Sheskin 2011
Friday, 18 <sup>th</sup> May	IRB, Field-Experiments  Presentation of assignment (Problem Description, Research Hypothesis, Experimental design)	
Friday 6 <sup>th</sup> July	Presentation of pilot studies (Note: Pilot studies need to be scheduled independently by participants)	

**Recommended Texts:****Statistical analysis**

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

Camerer, C, 2003, Behavioral Game Theory, 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.

**How to design laboratory experiments**

Katok, E. 2012. Using laboratory experiments to build better operations management models. Foundations and trends in technology, information and operations management 5(1) 1–88