

## Experimental methods, Lecture and tutorial

Urs Fischbacher (lecture), and Regina Stumpf (tutorial)

Monday, 13:30-15:00, lecture, R611

Mi. 10:00-11:30, D301 or Fr. 13:30-15:00, C358 every two week

### Content

Experiments have established their own role in economics as a source of knowledge. Experiments allow testing the behavioral assumptions underlying economic modeling; they provide tests for the empirical validity of different models and permit to establish behavioral regularities even when a theory is not yet available. Experiments also guide the researchers in the development of new theories. So, without experiments, prospect theory and social preference theories would be without relevance, since the relevance could not be proven. This lecture gives an introduction into the experimental method in economics. It should enable you to design, plan, conduct, and analyze an economic experiment. Furthermore, it presents typical and prototypical experimental designs.

### Schedule

Lectures	15:15-16:45	Tutorials (corresponding week)
10.04.2023	--- Easter holiday	
17.04.2023	1 Introduction	Visual Data Analysis (Exercise 1)
24.04.2023	2 Designing Experiments	
01.05.2023	--- Holiday	Design I (Exercise 2)
08.05.2023	3 Data Analysis	
15.05.2023	4 Experimental Markets	Non-Parametric Tests I (Exercise 3)
22.05.2023	5 Fairness and Cooperation	
29.05.2023	--- Pentecost holiday	
05.06.2023	--- Holidays	
12.06.2023	Measuring Preferences	Non-Parametric Tests II (Exercise 4)
19.06.2023	6 Strategic Thinking and Beliefs	
26.06.2023	7 Testing Theories	Design II (Exercise 5)
03.07.2023	8 Auctions and Matching	
11.07.2023	9 Field Experiments, Q&A	Q&A

### General Literature

1. Charles A. Holt, Markets, games, and strategic behavior, 2006.
2. Colin F. Camerer, Behavioral Game Theory, Princeton University Press, 2003.
3. Davis/Holt, Experimental Economics, Princeton University Press, 1993.
4. Kagel/Roth, The Handbook of Experimental Economics, Princeton Univ. Press, 1995.
5. Daniel Friedman, Shyam Sunder, Experimental Methods, Cambridge Univ. Press, 1994.

6. Daniel Friedman, Alessandro Cassar, Economics lab, an intensive course in experimental economics, Routledge, London, 2004
7. Francesco Guala, The Methodology of Experimental Economics, Cambridge University Press, 2005.
8. Theodore C. Bergstrom and John H. Miller, Experiments with Economic Principles, McGraw-Hill, 1997.
9. Charles R. Plott, Vernon L. Smith, Handbook of Experimental Economics Results, Volume 1, North Holland , Amsterdam, New York, Oxford, Tokyo, 2008.
10. Bardsley, N., Cubitt, R., Loomes, G., Moffatt, P., Starmer, C. and R. Sugden, Experimental Economics: Rethinking the Rules. Princeton University Press, 2010.
11. Dan Ariely, The Upside of Irrationality: The Unexpected Benefits of Defying Logic at Work and Home, Harper, 2010.
12. Guillaume R Frichte, Andrew Schotter, 2015, Handbook of Experimental Economic Methodology. ISBN-13: 9780195328325
13. Sanjit Dhami, The Foundations of Behavioral Economic Analysis.

Book (1) is an introduction into economics using experiments. It can also be considered as an introduction to experimental economics. It is most appropriate at the undergraduate level. Books (2) to (4) provide an overview of experimental economics. They deal with the question how economic problems are translated into an experimental design, what we observe in these experiments and what we can learn from these results. The book by Camerer is most up-to-date; and for this reason, it is the most recommendable among them. The books by Friedman/Sunder and Friedman/Cassar give introductions into the experimental method. They present in a rather abstract way what types of research questions experiments can address, and explain very concretely how experiments are implemented and conducted. Guala is a philosopher. His book discusses experiments from a philosophical point of view. Bergstrom/Miller is an introduction into economics based on experiments. Bardsley et al. discuss the experimental method. The book relies on a lot of knowledge and is most enjoyable for the experienced researcher. In (11) you find an entertaining introduction to experimental and behavioral economics. (13) is a comprehensive overview of behavioral economics.

The lecture will be based on slides, which will also contain the necessary references. For the exam, the content presented in the lecture, i.e. the slides are relevant.