

Experiments in Social Science

Periods I and II: September 1 – December 14, 2013

Objectives: An overview of the principal philosophical topics related to how we understand economic phenomena and acquire knowledge of them.

Classes (weekly): Tuesday 10.15 - 11:45 - Classroom: U40 Sali 5.

Assessment (attendance of 11/14 classes is required for credits):

- 40% class attendance and participation + 9 reading reviews (300 words)
- 60% final paper (4000 words)

Description of the course

This course will overview recent developments of experimental approaches in the social sciences from a philosophy-of-science perspective. There are three main goals for this course: i) to highlight the major methodological and foundational issues of using experimental methods in the social science (e.g. nature of hypothesis testing and confirmation, extrapolation of experimental results); ii) to look at recent developments of the experimental method in social sciences (e.g. the interaction between economics and psychology, field experiments, survey experiments, prediction markets); iii) to get some hands-on knowledge of experimentation in the social sciences by looking at case studies, like expert prediction, the FCC auctions, and the Biases & Heuristics program in psychology.

In this course we will make use of concrete examples from experiments in economics, psychology, sociology, political science, and also in philosophy, where the experimental method is just starting to develop. The course is aimed at philosophy students interested in experiments in the (social) sciences, and social science students interested in the foundations and developments of experimental methods in their fields. Upon successfully completing the course, the student will be able to critically evaluate the potentials and limitations of experimental social sciences, and to employ analytical tools developed in the philosophy of science. To succeed in this course the student will need genuine interest in both philosophy and scientific practice, but no prior knowledge is required.

Schedule of classes & list of required readings

★ The following list of readings is subject to changes before the start of classes. ★

★ A reader will be provided ★

1. INTRODUCTION

September 3, 2013 (Carlo Martini)

Salmon, M.H. 1992. 'Philosophy of the Social Sciences'
Guala, F. 2005. *The Methodology of Experimental Economics* – Chapter 1: Introduction

- September 10, 2013** (Michiru Nagatsu & Carlo Martini)
2. **HD model and Hypothesis-testing** Guala, F. 2005. *The Methodology of Experimental Economics* – Chapters 2 and 3
- September 17, 2013** (Michiru Nagatsu)
3. **Internal Validity** Guala, F. 2005. *The Methodology of Experimental Economics* – Chapter 4
- September 24, 2013** (Michiru Nagatsu)
4. **External Validity** Guala, F. 2005. *The Methodology of Experimental Economics* – Chapter 7
Daniel P. Steel. 2008. *Across the Boundaries* – Chapter 8
- October 1, 2013** (Michiru Nagatsu & Carlo Martini)
5. **Field Experiments** Harrison G.W. and List, J.A. 2004. ‘Field Experiments’
- October 8, 2013** (Michiru Nagatsu & Carlo Martini)
6. **Survey Experiments** Mutz D. C. 2011. *Population-based Survey Experiments* – Chapter 1
- October 15, 2013** (Michiru Nagatsu & Carlo Martini)
7. **Social Norms Sociology vs. Economics** Rauhut H. and Winter F. ‘A sociological perspective on measuring social norms’
Wallander, L. 2009. ‘25 years of factorial surveys in sociology’
- October 29, 2013** (Carlo Martini)
8. **Incentives Psychology vs. Economics** Guala, F. 2005. *The Methodology of Experimental Economics* – Chapter 11
Hertwig, R. and Ortmann, A. 2001. ‘Experimental practices in economics’
- November 5, 2013** (Carlo Martini)
9. **The role of experiments in science I** Sugden, R. 2011. ‘Explanations in search of observations’
Sugden, R. 2005. ‘Experiments as exhibits and experiments as tests’
- November 12, 2013** (Carlo Martini)
10. **Prediction Markets** Arrow, K. J. et al. 2008. ‘The promise of prediction markets’
Graefe and Armstrong. 2011. ‘Comparing nominal groups, Delphi and prediction markets’
- November 19, 2013** (Carlo Martini)
11. **Case Studies I: Gigerenzer Heuristics & Biases** Gigerenzer, G. et al. 1991. ‘Probabilistic mental models’
**** please bring your laptop or tablet to class ****
- November 26, 2013** (Carlo Martini)
12. **Expert Prediction** Hsu, C. C., and Sandford, B. A. 2007. ‘The Delphi technique: making sense of consensus’
Cooke, R. M. 1991. *Experts in uncertainty* – Chapter 1
- December 3, 2013** (Michiru Nagatsu & Carlo Martini)
13. **Case Studies II: Economic Engineering** Guala, F. 2001. ‘Building economic machines: The FCC auctions’
Alexandrova, A., and Northcott, R. 2009. ‘Progress in economics’
- December 10, 2013** (Michiru Nagatsu & Carlo Martini)
14. **Wrap-up**