Overview and Objectives

Experimental economics is a grown, yet growing, field in economics and business administration. It provides a method to test theoretical predictions, to explore human behavior in specific economic environments, to help design institutions, to advice on policy and to search for patterns and regularities in economic wheeling and dealing. The range of experimental test beds can be from lab experiments, field experiments, and surveys. This course will link issues of applied game theory, decision theory, industrial organization, markets, institutional design, and macroeconomics with behavioral and experimental economics, field experiments, and Neuro-economics.

We expect that this course will help students to think that economics can be an experimental science. Students will learn mainly through “learning by doing” which provides a working knowledge of techniques for conducting laboratory, field, experiments, surveys, etc. As a start students will be guided through a selection of experimental and behavioral economics literature with the aim to search for interesting economic, psychological and behavioral research questions, which are addressed with a feasible and original experimental design. These experiments will be run in class, by email, online etc... The motivation and results are summarized as in a professional paper. Students will also participate as subjects in various replications of experiments from the literature, and in the experiments designed by the students in the class. All in all, this course requires a lot of involvement and own ideas from the side of the students, an experiential learning journey.

Course Outline

The course will be divided in two parts:
I. In the first part we will cover a broad range of selected topics in which experimental methods are applied. Students will discuss recommended reading material. In addition in groups of three or 4, students will replicate one classical experiment. In this first part, we will discuss questions like:
   • Should we graft fairness into game theory?
   • "I think that you think that I think etc.". Is this how people reason?
   • Women don’t ask? and other gender differences.
   • To many possible solutions: how theory and experiments can help to make predictions when there are multiple solutions.
   • How can we model learning to describe observed behavior?
   • Auctions in the lab and in the field
   • Experiments extendable to macro?
   • What can those fMRI-brain scans do for Economics?
   • External validity? A link between the field and the lab.
   • Can there be too much choice?
   • etc
II. During the second part of the course, every student (or a group of three or four) will design and run a novel experiment.

Course Requirements (see also detailed list of course requirement at the end)

- Reading list
- Replication and discussion of a classical experiment (in groups of two to four).
- Design, performance and presentation of an original experiment (alone or in groups of two or three)
- Paper (about 10-15 page).

Evaluation

The grade will be based on class participation, performance as experimenter, presentations (20%), and final paper (80%).

Materials

General Literature:
Camerer, C., and Loewenstein, G. "Behavioral Economics: Past, Present, Future".

Introduction:

Individual decision making: Choice overload and hyperbolic discounting
iyengar, s. s., jiang, w., & huberman, g. (2004). how much choice is too much? contributions to 401 (k) retirement plans. in o. s. mitchell, & s. utkus (eds.), pension design and structure: new lessons from behavioral finance (pp. 83-96). oxford: oxford university press.

iyengar, s. s., & lepper, m. r. (2000). when choice is demotivating: can one desire too much of a good thing? journal of personality and social psychology, 79(6), 995-1006.


angeletos, george-marios, david laibson, andrea repetto, jeremy tobacman, and jeremy tobacman, and stephen weinberg (2001), "the hyperbolic consumption model: calibration, simulation, and empirical evaluation" journal of economic perspectives, august, pp. 47-68.


bargaining:
roth, a.e (1995). bargaining experiments. in kagel, j., a. e. roth, the handbook of experimental economics. princeton, 253-331.


charness, g. (1997). attribution and reciprocity in a simulated labor market: an experimental investigation. working paper.

fehr e. and e. tougareva (1995). do competitive markets with high stakes remove reciprocal fairness? experimental evidence from russia, working paper.


camerer, c. 2003 behavioral game theory, chapter bargaining.

coordination:


heinemann, f., r. nagel, and p. ockenfels, “measuring strategic uncertainty in coordination games”, review of economic studies, 2009 (76), pages181–221

social preferences
fehr, e., klaus m., and schmidt a. theory of fairness, competition and cooperation, quarterly journal of economics 114, (1999), 817-868


shaked a., the rhetoric of inequity aversion (march 1, 2005). http://ssrn.com/abstract=675227


shaked a., a brief response by a. shaked to fehr & schmidt\'s reply to shaked\'s pamphlet (march 8, 2005) http://www.wiwi.unibonn.de/shaked/rhetoric/BRF.pdf


dufwenberg, m. and g. kirchsteiger (2004): a theory of sequential reciprocity, games and economic behavior, 47, 268-298.

gender, discrimination

neezy, uri, muriel niederle, aldo rustichini, “performance in competitive environments: gender differences”, quarterly journal of economics, cxviii,
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August 2003, 1049 – 1074.
Muriel Niederle, and Lise Vesterlund, “Do Women Shy away from Competition? Do Men Compete too Much?”
Niederle Muriel, Carmit Segal, Lise Vesterlund “How Costly is Diversity? Affirmative Action in Light of Gender Differences in Competitiveness” discussion paper
Falk, Armin, and Thomas Dohmen “Performance Pay and Multi-dimensional Sorting: Productivity, Preferences and Gender” (IZA DP 2001)

Incentives and Reciprocity
Carmit Segal, “Motivation, Test Scores, and Economic Success”, discussion paper.


Levels of reasoning
Bosch-Domènech, A., J. García-Montalvo, R. Nagel, A. Satorra (2002), One, Two, (Three), Infinity …:
Vincent P. Crawford and Nagore Iriberri, "Level-k Auctions: Can a Non-Equilibrium Model of Strategic Thinking Explain the Winner's Curse and Overbidding in Private-Value Auctions?," Econometrica 75 (November 2007), 1721–1770

Learning:
12E017
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**Auctions:**


**Macro experiments:**
Duffy, John (forthcoming) Macroeconomics: A Survey of Laboratory Research, in Handbook of Experimental Economics (Volume 2), edited by John Kagel and Al Roth


Relation between internet/field experiments and experimental economics


Dan Ariely, Axel Ockenfels and Alvin E. Roth An Experimental Analysis of Ending Rules in Internet Auctions.The RAND Journal of Economics, forthcoming. For a extensive list of field experiments see http://www.fieldexperiments.com/ which is from John List.

**Neuro-economics**
http://www.hss.caltech.edu/~camerer/JELfinal.pdf