Experimental and Behavioral Economics
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This course provides an introduction into the techniques of experimental economics and applies these techniques to important research questions in different fields of economics. At the end of the course students should be able to design and run their own experiments examining their preferred questions. I assume that students have a basic knowledge of microeconomic theory and game theory at the level of, for example, Hal Varian’s advanced textbook on “Microeconomic Analysis” and Robert Gibbons’ textbook on “Game Theory for Applied Economists”. Course requirements are Micro I (14.121) and Micro II (14.122). The course consists of 12 lectures. The course will take place on the following Wednesdays from 4-7 p.m.: Sept 15, Sept 22, Sept 29, Oct 6, Oct 13. In addition, there will also be a course on Friday, September 24 from 9-12 a.m.

The course takes place at MIT in room E51-372.

On the following pages you will find a short outline of the course, a description of your tasks and a reference list. I strongly recommend that students read the articles with an asterisk.

Lecture 1 (Sept 15): Methods, advantages and limitations of laboratory experiments
Lecture 2 (Sept 15): Competitive Experimental Markets (Double Auction & Gift Exchange)
Lecture 3-4 (Sept 22): Cooperation & Collective Action
Lecture 9-10 (Oct 6): The Behavioral Economics of Incentives (Relations, Threats & Loss Aversion)
Lecture 11 (Oct 13): Limited Rationality & Strategic Interaction (The Case of Money Illusion)
Your tasks during this course

1) Write a proposal for an experiment. The proposal should describe the economic problem that you want to understand with the help of the experiment. You should develop behavioral hypotheses and also speculate about the outcome of the experiment. This speculation is crucial because it tells us why your experiment could be interesting and might lead to new insights. The first two pages of your proposal are due September 29th (4th lecture) and roughly 4 pages will be due by Friday, October 8th.

Please email your proposals to me (efehr@iew.unizh.ch) and to my teaching assistant David Abrams (dsabrams@MIT.EDU). This enables us to give you feedback (either by email or in a meeting). The final proposal consists of 5-6 pages and must be sent to me and to David Abrams by 24th October.

Below is a list of questions that need to be answered in your proposal. This list will guide you in designing the experiment and in the write up of your proposal.

- Which economic question do you want to answer with your experiment?
- What are the potential answers to your question?
- What are the advantages and disadvantages of an experiment for answering your question?
- What are the chances that the result of your experiment will surprise others? What are your hypotheses regarding the outcome of the experiment? Will anybody change his/her opinion?
- How do you conduct the experiment? (Describe the design)
- Is your design the simplest possible design to answer your question?

2) Homework assignments. This involves writing two 1-2 page referee reports on two papers and solving a problem sets related to course topics. A good referee report shortly summarizes the main questions and main results of a paper, evaluates whether the paper is important or not, and describes the achievements and the shortcomings of the paper. Suggestions for how the paper could be improved are also good.

Timeline of your tasks

- Sept 29: Hand in first 2 pages of your idea for an experiment (project proposal).
- Oct 8: Hand in 4 pages of your improved project proposal.
- Oct 24: Hand in final version of your project proposal.
Lecture 1: Methods, Advantages and Limitations of Laboratory Experiments

Davis, Douglas and Holt, Charles (1993); Experimental Economics, Princeton University Press, Princeton, New Jersey: Chapter 1, Introduction and Overview

Lecture 2: Competitive Experimental Markets


Lecture 3-4: Cooperation and Collective Action

Lecture 5-8: Social Preferences – Theory and Evidence

Falk, Armin and Urs Fischbacher (1999); “A Theory of Reciprocity”, Working paper No. 6, Institute for Empirical Research in Economics, University of Zürich.

Lecture 9-10: The Behavioral Economics of Incentives (Relations, Threats, Loss Aversion)


Fehr, Ernst and Bettina Rockenbach (2003); “Detrimental Effects of Sanctions on Human Altruism”, Nature 422, 137-140.


Ernst Fehr and Lorenz Goette (2002); „Do Workers work more if Wages are high? – Evidence from a Randomized Field Experiment“, Working paper No. 125, Institute for Empirical Research in Economics, University of Zürich.


**Lecture 11: Limited Rationality and Strategic Interaction – The Case of Money Illusion**


*Shafir, Eldar and Diamond, Peter and Tversky, Amos (1997); “Money Illusion”, Quarterly Journal of Economics, Vol. 112, No. 449,


Fehr, Ernst and Tyran, Jean Robert (2002); Limited Rationality and Strategic Interaction, Institute for Empirical Research in Economics, University of Zürich, Working Paper No. 130.

**Lecture 12: Neuroeconomics – The Neurobiological Foundations of Economic Behavior**


Rilling, James K; Gutman, David A; Zeh, Thorsten R; Pagnoni, Giuseppe; Berns, Gregory S and Kilts, Clinton D. (2002); A Neural Basis for Social Cooperation. Neuron, 35, 395-405.


