Department
The course is organized jointly between the Norwegian School of Management BI (by Professor Leif Helland), the Department of Political Science at the University of Oslo (by Professor Jon Hovi), and the Department of Economics at the University of Oslo (by Professor Kjell Arne Brekke).

Approval
The course is approved by the individual institutions according to their particular rules and regulations.

Time
18th – 21st August 2008

Language of instruction
English

Objective
This course is an introduction to experimental methods and recent applications with particular emphasis on economics and political science. Each day we will study a different subject and illustrate the different experimental techniques employed. Students will participate in a series of experiments and will acquire hands on experience designing and running an experiment in their area of interest. To create incentives, a number of the experiments students participate in will have real monetary payoffs.

The class will cover experiments on decision making under risk, bargaining, bounded rationality, collective action, social norms, cultural influences, and market behavior.

We will also review the even newer tools of neuroeconomics. We will concentrate on how experimental designs build on one another and allow researchers to isolate potential explanations. As part of the course, we will learn how to program in zTree, a software program particularly useful for running laboratory experiments.

Prerequisites
Some familiarity with formal modeling in the social sciences.

Course outline
Day 1: Introduction and bounded rationality

Introduction: Economics as an experimental science
We start with a discussion the use of experiments as a research method in the social sciences in general, and in economics in particular. We learn how to design and conduct experiments, but also discuss the strengths and weaknesses of different experimental approaches. We will also have a crash course in neuron-imaging techniques, covering their strengths and weaknesses.

- Why experimental economics?
- How to design an experiment.
- Strengths and weaknesses of the experimental method.
- Field and laboratory experiments.
- Neuroeconomics, measuring brain activity.

Bounded rationality: Non-Bayesian updating and the winner’s curse
In the first part of the lecture will shortly discuss the ability of individuals to perform Bayesian updating and how this relates to the famous winner’s curse.

- The winner's curse.
- Winner's curse and learning.
- The acquiring a company game
Bounded rationality: k-level thinking and beauty contests

Then we discuss bounds on strategic decision making and what this implies when there is heterogeneity in the ability of individuals to play strategically.
- Beauty contests.
- k-level thinking.
- Hide and seek games.

Day 2: Social preferences

On trust and ultimatums, positive and negative reciprocity

We discuss two well-known two-player games: the ultimatum and the trust game.
- Ultimatum game
- Trust game
- Does the trust game measure trust?
- Reference dependence: the moonlighting game
- Gender and cultural differences

Models of social preferences

We then discuss theoretical models of social preferences and how they have been tested in various experiments.
- Inequity aversion.
- Maximin preferences and efficiency.
- Intentions and reciprocity.
- Guilt aversion.

Day 3: Norms and institutions

Social dilemmas and norm enforcement

We discuss social dilemmas and the enforcement through punishment of cooperative norms. We focus on the motivations behind the actions of norm enforcers as well as those punished.
- Public good games (the voluntary contributions mechanism)
- Conditional cooperation
- Enforcement of cooperative behavior.

Institutions and cooperation

We then focus on the effects of different institutions on cooperative behavior.
- The economics of punishment.
- Detrimental effects of punishment
- Punishment in asymmetric situations
- Other decentralized institutions (communication)
- Centralized institutions (taxation and competition)
- Endogenous formation of institutions that promote cooperation

Day 4: Markets and voting

Voting

We discuss some of the experimental literature on voting and rent-seeking.
Markets: aggregation and strategic environment

We discuss how institutions, in particular markets, mitigate or multiply individual-level “anomalies”.

- Double-Auction and Asset Markets
- Strategic environment: complements vs. substitutes

Computer-based tools
Excel
Z-tree

Course structure
The bulk of the course is taught by Ernesto Reuben (http://ereuben.googlepages.com/home#teach), it is covered in four days, each day consisting of three hours of lectures and discussion and two hours of applied lab work. During lectures, we will discuss the topic for the day and also run short experiments to acquire hands on experience and understand the experiment from the subjects’ perspective. During the applied lab sessions we will initially learn how to design and program a computerized experiment using zTree. Thereafter the sessions will be used for students to design, program, and prepare their own experiment in their area of interest.

In addition to these 20 hours of teaching two additional lectures will be given.
1) A two hour lecture on neuropsychological experiments (lecturer to be announced).
2) A two hour lecture on voting, social preferences and rationality by Jean-Robert Tyran (http://www.econ.ku.dk/tyran/).

The bulk of the course takes place in Nydalen (where a functioning lab is located).

Evaluation
Participants are evaluated on three dimensions i) participation in the classroom experiments, ii) involvement in class discussions, and iii) an essay (10 – 15 pages) describing the execution of their own experiment. This essay will include a concise motivation for the chosen design, a short description of the experiment, the experimental instructions and protocol, and the computer program. Grading is pass or fail.
Compulsory literature

General reading


Introduction: Economics as an experimental science


Bounded rationality: Non-Bayesian updating and the winner's curse


On trust and ultimatums, positive and negative reciprocity


Models of social preferences


Social dilemmas and norm enforcement


**Institutions and cooperation**


**Voting**


**Markets: aggregation and strategic environment**


**Recommended literature**

**General reading**


Bounded rationality: Non-Bayesian updating and the winner’s curse


Bounded rationality: k-level thinking and beauty contests


On trust and ultimatum, positive and negative reciprocity


Models of social preferences


Social dilemmas and norm enforcement


Institutions and cooperation


Economic Letters forthcoming.


Voting


**Markets: aggregation and strategic environment**


