

Econ 686
Experimental Economics II
Spring Semester 2007
Tuesday and Thursday, 3:00 p.m. – 4:15 p.m.
Rawls 2077

Professor: Steve Gjerstad

Office: Krannert 456

Office Hours: Tuesday 1:30 – 3:00

Wednesday 1:30 – 3:00

Office Phone: 494-4422

E-mail: gjerstad@purdue.edu

Course Text: No text required.

Course Web Site: <http://www.krannert.purdue.edu/faculty/gjerstad/Econ686.html>

Course Overview

This course will focus on two topics. The first topic is a relatively new area of research in experimental economics; the second topic is one of the oldest in the field. We'll begin with a number of papers and models that have been developed to examine the impact of alternative error structures in models of choice. In the second part of the course we'll examine some recent work on experimental markets.

Experiment data rarely conforms exactly to the predictions of a model. Statistical tests of models therefore require some assumptions about how errors are generated. Over the past 15 years, a number of papers and models have appeared which have demonstrated clearly that the form of decision errors has substantial impact on the predictions of a model. The most common error types are random mistakes (or trembles), random utility (which is the basis of the well-known logistic choice model), and random preferences. We'll examine some implications of each of these models in individual decision problems, in games, and in a model of social preferences.

Over the past 45 years, market experiments have demonstrated that the competitive market model is an excellent predictor of market outcomes. In the second segment of the course, we'll look at some of the basic results, such as convergence of prices and allocations in markets with induced supply and demand, and then we'll look at other market environments in which convergence is more challenging. These include markets with capital adjustment, markets with income effects, and prediction markets in which people have heterogeneous information.

Evaluation

Your grade in Econ 686 will be based on preparation of a research paper. The paper topic choice is yours, but it should be on an experimental topic. If you took Experimental Economics I with Professor Cason in the fall, you should have run a pilot experiment in his class. One natural paper topic would be a write up of that experiment. Alternatively, you can take any experiment discussed in class and analyze the data from that.

Reading list

Papers and lecture notes will be assigned as course readings. Readings will be announced in class and posted to the course web site when they are assigned. Assigned readings will be discussed during lectures.

Loomes, Graham (2005). "Modelling the Stochastic Component of Behaviour in Experiments: Some Issues for the Interpretation of Data," *Experimental Economics*, Vol. 8, pp. 301 – 323.

Loomes, Graham and Robert Sugden (1998). "Testing Different Stochastic Specifications of Risky Choice," *Economica*, Vol. 65, pp. 581 – 598.

Sopher, Barry and Gary Gigliotti (1993). "Intransitive Cycles: Rational Choice or Random Error? An Answer Based on Estimation of Error Rates with Experimental Data," *Theory and Decision*, Vol. 35, pp. 311 – 336.

Loomes, Graham, Chris Starmer, and Robert Sugden (1991). "Observing Violations of Transitivity by Experimental Methods," *Econometrica*, Vol. 59, pp. 425 - 439.

Goeree, Jacob K., Charles A. Holt, and Thomas R. Palfrey (2003). "Risk averse behavior in generalized matching pennies games," *Games and Economic Behavior*, Vol. 45, pp. 97 – 113.

Cox, James C., Daniel Friedman, and Steven Gjerstad (2007). "A tractable model of reciprocity and fairness," *Games and Economic Behavior*, Vol. 59, pp. 17 – 45.