

Experimental Economics  
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This course provides an introduction to experimental/behavioral economics. We will discuss the various applications of experimental economics – testing the empirical validity of theory, using the lab as a “wind tunnel” for understanding how market design affects behavior, and using experiments as a teaching tool.

The course will emphasize the connection between theory and experiments. For each topic covered, we will begin with a discussion of the relevant theory. For the experiments, we will carefully consider the appropriateness of the experimental design (emphasizing the important or innovative aspects of the design). We conclude with a discussion of the experimental results and suggestions for future theoretical and experimental research.

### Topics and Readings

#### Markets

Smith, V. (1962), “An Experimental Study of Competitive Market Behavior,” *Journal of Political Economy* 70, 111-37.

Smith, V. (1976), *Experimental Economics: Induced Value theory*, *American Economic Review Papers and Proceedings* 66, 274-279.

#### Mixed-strategy play

O’Neill, B. (1987): “Nonmetric Test of the Minimax Theory of Two- Person Zero-Sum Games,” *Proceedings of the National Academy of Sciences* 84, 2106-2109.

Brown, D. and R. Rosenthal (1990): “Testing the Minimax Hypothesis: A Reexamination of O’Neill’s Experiment,” *Econometrica* 58, pp. 1065- 1081.

Wooders, J. and J. Shachat (2001): “On The Irrelevance of Risk Attitudes in Repeated Two-Outcome Games,” *Games and Economic Behavior* 34, 342-363.

#### Experts and Novices

Walker, M. and J. Wooders (2001): “Minimax Play at Wimbledon,” *American Economic Review* 91, 1521-1538.

Walker, M., Wooders, J. and R. Amir (2000): “Equilibrium Play in Matches: Binary Markov Games,” *University of Arizona Working paper* 00-01.

Palacios-Huerta, I. and O. Volij (2008): “Experientia Docent: Professionals Play Minimax in Laboratory Experiments,” *Econometrica* 76, pp. 71-115.

Levitt, S., List, J., and D. Reiley (2007): “What Happens in the Field Stays in the Field: Professionals Do Not Play Minimax in Laboratory Experiments,” forthcoming *Econometrica*.

Wooders, J. (2008): “Does Experience Teach? Professionals and Minimax Play in the Lab,” *University of Arizona Working Paper* #08-04.

#### Communication in games

Moreno, D. and J. Wooders (1996): “Coalition-Proof Equilibrium,” (with Diego Moreno) *Games and Economic Behavior* 17, 80-112.

“An Experimental Study of Communication and Coordination in Noncooperative Games,” (with Diego Moreno) *Games and Economic Behavior* 24 (1998), 47-76.

#### Auctions

Cox, J., Roberson, B. and V. Smith (1982): “Theory and Behavior of Single Object Auctions,” pp. 1- 43 in V. Smith (ed.), *Research in Experimental Economics*, vol. 2. Greenwich: JAI Press, 1982.

Reynolds, S. and J. Wooders (2009): “Auctions with a Buy Price,” *Economic Theory* 38, 9-39.

Shahriar, Q. and J. Wooders (2007): “An Experimental Study of Auctions with a Buy Price Under Private and Common Values,” University of Arizona Working Paper #07-19.

#### Reference Texts

Camerer, Colin (2003): *Behavioral Game Theory: Experiments in Strategic Interaction*

Davis, D. and C. Holt (1992): *Experimental Economics*

Kagel, J. and A. Roth (1998): *The Handbook of Experimental Economics*