

## Experimental Economics Spring 2010

Taking a course in experimental economics is a little like going to dinner at a cannibal's house. Sometimes you will be the diner, sometimes you will be part of the dinner, sometimes both.

If you take a laboratory course in the physical sciences, you get to mix smelly chemicals, or monkey with pulleys, or dissect a frog, but you are always the experimenter and never the subject of the experiment. In the market experiments conducted in this class, you and your classmates will be the *participants* in the markets as well as the scientific *observers* who try to understand the results.

It is hard to imagine that a chemist can put herself in the place of a hydrogen molecule. A biologist who studies animal behavior is not likely to know what it feels like to be a duck. You are more fortunate. You are studying the behavior and interactions of people in economically interesting situations. And as one of these interacting economic agents, you will be able to experience the problems faced by such an agent first hand. We suspect that you will learn nearly as much about economic principles from your experience as a participant as you will from your analysis as an observer.

---Bergstrom and Miller's 1999 preface.

**Course Description:** This course will provide the student with the necessary tools to be an avid consumer of the experimental literature and eventually a producer of the literature. Thus, it will provide a summary of recent experimental findings and detail how to gather and analyze data using experimental methods. There is no official text, but students are encouraged to look at the excellent books of Douglas Davis and Charles Holt [Experimental Economics, 1993] as well as John Kagel and Alvin Roth [Handbook of Experimental Economics, 1995].

**Office Hours (Rosenwald 205c): W 8pm-8:45pm**

**TAs Office Hours:**

Amalia Di Girolamo: Th 3:30-5pm Booth - Room 370

Anya Savikhin TBA

James Edwards F 1pm-2:30pm in Stuart Café

Alec Brandon Tu 9:30am-11am in Harper Library Café

**Class Participation:** After the initial instructor seminars and methodological discussions, each week will include actual participation in a select experiment and a discussion of relevant papers. The course will be conducted as both a teaching and research opportunity for all involved. The major emphasis will be an introduction to the tools of the trade as well as an emphasis on new questions and new experiments that could be conducted to address them.

**Course Outline:** One caveat is that this is merely a sampling of work that has been done in a few areas of study. The field is growing fast and I desire to give you a glimpse of some of the manuscripts that have been published and a brief look at some working papers. I am sure that we will add to this list along the way. A more complete list can be found at Charlie Holt's (U. Virginia) website. My website contains a list of field experiments: [www.fieldexperiments.com](http://www.fieldexperiments.com)

**Grading:** You are required to fulfill the following assignments, with grading weights in parentheses. There is no mid-term or final exam, but take-home questions will be given occasionally.

*(50) Quizzes and take-home questions:* Roughly 3 or so quizzes will be given during the lab hour. I reserve the right to give announced—or surprise—quizzes during scheduled class time as well. We will throw out your worst performance and average the remaining quizzes.

Every few weeks or so I will give take-home questions; each of you will be responsible for answering these questions and turning them in at the required time. Handing these in late will be punished severely with point deductions of 5 points per hour late.

*(35) Research Presentation:* Each of you is expected to assemble a research proposal by the end of the quarter—since the class is so large I would prefer if people would do these in groups of up to 5. This proposal begins by providing a literature survey of a series of experimental studies. Experimentalists typically take stock in making steady, incremental progress to speak to theorists and policymakers, and to find facts. This follows from the belief that a series of experiments provides a more reliable conclusion than any sporadic group of studies. I subscribe to this belief as well. Accordingly, you need to be an expert in your chosen area of research.

The proposal then describes a new research question(s) and why it is important, and also includes relevant theory, experimental instructions, and an experimental design. To facilitate feedback, each group is required to present his/her research proposal near the end of the quarter in a 20-minute time slot. The written proposal is due 48 hours after your presentation and you should take account of the comments given during your seminar.

Some guidelines questions that we will discuss:

1. What is the question you would like to have answered after the experiment?  
(Your answer should be a single sentence with a question mark at the end.)
2. What do you know already about the possible answers to the question you have stated above?
3. What are the various possible ways of finding an answer to the question you have stated above? Include both experimental as well as any other methods you know about.

4. What are the advantages and disadvantages of using an experiment to find an answer?
5. What are the chances that the answer you get from the experiment will surprise you or others? What are the chances that it will change someone's mind?
6. How would you conduct the experiment? (Write down a design and instructions.)
7. Is your experimental design the simplest possible design to help answer the question you have stated?
8. What are the possible outcomes of the experiment? Do the possible outcomes include at least one outcome that will answer the question you stated above? What is the chance that you will observe this outcome?

(15) *Class participation*: asking questions, reading the assigned papers, etc., all lead to good scholarship. I am demanding that you are prepared and participate in class.

The following schedule represents a rough guess of the topics we will cover. **Those in bold are required readings; those readings not bolded are recommended.** I reserve the right to draw lecture materials from all of these studies.

## 1. Introduction to experiments/first steps to reading an experimental paper

### A. Experimental terminology, some common statistical methods, etc.

- **See introductory chapters in Davis and Holt and Kagel and Roth.**
- Roth, Alvin E. (1988); "Laboratory Experimentation in Economics: A Methodological Overview", *Economic Journal*, Vol. 98, 974-1031.
- **Harrison, G. W., and J.A. List., "Field Experiments," *Journal of Economic Literature*, 2004, 42, 1009-1055.**
- **List, John A., "Homo experimentalis evolves," *Science*, July 11, 2008, 321(5886), pp. 207-208.**

### B. Optimal Design Choice

- Sample size, power tests, etc.
- **List, J.A., S. Sadoff, M. Wagner. (2008) "So you want to run an experiment, now what? Some Simple Rules of Thumb for Optimal Experimental Design," NBER working paper 15701.**

### C. Graduate Student 15-minute discussions (Angus, Bayesian, within vs. between designs, etc.)

## 2. Market Experiments

### Two-Sided

- **Edward H. Chamberlin (1948) "An Experimental Imperfect Market," *The Journal of Political Economy*, Vol. 56, No. 2., pp. 95-108.**

- **Smith, Vernon L. (1962) “An Experimental Study of Competitive Market Behavior,” *Journal of Political Economy*, 70:3 (June), 111-137.**
- Smith, Vernon L. (1964) “The Effect of Market Organization on Competitive Equilibrium,” *Quarterly Journal of Economics*, 78:2 (May), 181-201.
- Smith, Vernon L. (1965) “Experimental Auction Markets and the Walrasian Hypothesis,” *Journal of Political Economy*, 73:4 (August), 387-393.
- Friedman, Daniel (1984) “On the Efficiency of Experimental Double Auction Markets,” *American Economic Review*, 74:1 (March), 60-72.
- Davis, D. and Holt, C. (1998) “Conspiracies and Secret Discounts in Laboratory Markets,” *Economic Journal*, 108: 736-756.
- Cason, Timothy and Charles Noussair (2000) “Experimental Markets: Introduction,” *Economic Theory*, Vol. 16, No. 3, November, 2000, pages 1-8.
- Cason, Timothy and Charles Noussair (2001) “The Experimental Study of Market Behavior”, in *Advances in Experimental Markets*, Timothy Cason and Charles Noussair, eds. Springer Verlag Publishers, 1-14.
- Douglas Davis and Charles Holt (2004) “The Effects of Collusion in Laboratory Experiments,” in C. Plott and V. L. Smith (eds.) *Handbook of Experimental Economics Results*, North Holland Press.
- **List, John A. “Testing Neoclassical Competitive Theory in Multi-Lateral Decentralized Markets,” *Journal of Political Economy*, (2004), 112 (5): pp. 1131-1156.**
- List, John A. “The Economics of Open Air Markets,” U. Chicago working paper, 2008.

### **One-Sided**

- Summaries: Kagel, John, "Auctions." Chapter 7 in KR. Parts of Chapter 5 in DH.
- Richard H. Thaler, "Anomalies: The Winner's Curse." *Journal of Economic Perspectives*, Vol. 2, No. 1. (Winter, 1988), pp. 191-202.
- Paul Milgrom, "Auctions and Bidding: A Primer (in Symposia: Auctions)" *Journal of Economic Perspectives*, Vol. 3, No. 3. (Summer, 1989), pp. 3-22.
- Riley, J.G. "Expected Revenue from Open and Sealed Bid Auctions (in Symposia: Auctions)" *Journal of Economic Perspectives*, Vol. 3, No. 3. (Summer, 1989), pp. 41-50.
- Cox, James, Roberson, Bruce, and Vernon Smith, “Theory and Behavior of Single-Object Auctions,” in V. Smith (ed.) Research in Experimental Economics, Greenwich, CT, 1982, pp. 1-43.
- Kagel, Harstad, and Levin, "Information Impact and Allocation Rules in Auctions with Affiliated Private Values: A laboratory Study." *Econometrica*, 1987, 1275-1304.
- Cason Timothy N. “An Experimental Investigation of the Seller Incentives in the EPA's Emission Trading Auction,” *American Economic Review*, Vol. 85, No. 4. (Sep., 1995), pp. 905-922.

- Levin, Dan, John Kagel, and Jean-Francois Richard, "Revenue Effects and Information Processing in English Common Value Auctions." *American Economic Review*, 1996, 442-460.
- Anderson, Simon P., Jacob K. Goeree and Charles A. Holt, "Rent Seeking with Bounded Rationality: An Analysis of the All-Pay Auction." *Journal of Political Economy*, 1998, 828-853.
- Kagel, John H. and Dan Levin, "Common Value Auctions with Insider Information." *Econometrica*, 1999, 1219-1238.
- List, John A. and David Lucking-Reiley, "Demand Reduction in Multiunit Auctions: Evidence from a Sportscard Field Experiment." *American Economic Review*, 2000, 961-972.
- Harrison, Glenn, and J. List (2008) "Naturally Occurring Markets and Exogenous Laboratory Experiments: A Case Study of the Winner's Curse," *The Economic Journal*, 118(528): pp. 822 – 843.

### 3. Public Good Provision

#### A. Public Goods Games

- Summary: Chapter 6 DH; Ledyard, John, "Public Goods: A Survey of Experimental Research." Chapter 2 in KR.
- Marwell, Gerald and Ruth Ames, "Economists Free Ride, Does Anyone Else? Experiments on the Provision of Public Goods." *Journal of Public Economics*, 1981, 295-310.
- Isaac, R. Mark and James Walker, "Group Size Effects in Public Goods Provision: The Voluntary Contributions Mechanism." *QJE*, 1988, 179-99.
- Andreoni, James, "Why Free Ride? Strategies and Learning in Public Goods Experiments." *Journal of Public Economics*, 1988.
- Isaac, R. Mark and James Walker, and Arlington Williams, "Group Size and the Voluntary Provision of Public Goods: Experiments Utilizing Very Large Groups." *Journal of Public Economics*, 1994, 54, 1-36.
- Andreoni, James, (1995) "Cooperation in Public Goods Experiments: Kindness or Confusion?" *AER*, 85(4): 891-904.
- **Andreoni, James, (1995) "Warm-glow versus Cold Prickles: The Effects of Positive and Negative Framing in Public Goods Experiments." *QJE*, 110(1): pp. 1-21.**
- Rondeau, Daniel, William D. Schulze and Gregory L. Poe, "Voluntary Revelation of the Demand for Public Goods Using a Provision Point Mechanism." *Journal of Public Economics*, 1999, 455-470.
- Fehr, Ernst and Simon Gächter, "Cooperation and Punishment in Public Goods Experiments." *AER*, 2000, 980-994.
- Falkinger, J., E. Fehr, S. Gächter, and J. Winter-Ebmer, "A Simple Mechanism for the Efficient Provision of Public Goods: Experimental Evidence," *American Economic Review* 90, (2000), 247-264.

- Jacob Goeree, and Charles A. Holt and Susan Laury, “Private Costs and Public Benefits: Unraveling the Effects of Altruism and Noisy Behavior,” *Journal of Public Economics*, 83(2): pp. 255-276.

## **B. Economics of Charity**

- Andreoni, J. (2004). “Philanthropy.” In “Handbook of Giving, Reciprocity, and Altruism,” L.A. Gerard-Varet, S.C. Kolm, and J.M. Ythier, Editors.
- List John A. and David Lucking-Reiley “The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign,” *Journal of Political Economy* (2002), 110(1), pp. 215-233.
- Potters, J., M. Sefton, and L. Vesterlund (2005) “After you – endogenous sequencing in voluntary contribution games,” *Journal of Public Economics*, 89(8): pp. 1399-1419.
- Eckel, C. and P. Grossman (2003) “Rebates Versus Matching: Does how We Subsidize Charitable Contributions Matter?” *Journal of Public Economics*, 87(3): pp. 681-701.
- Goeree, Jacob, Emiel Maasland, Sander Onderstal, and John Turner (2005) “How (Not) to Raise Money,” *Journal of Political Economy*, 113(4): 897-926.
- **Landry, C., A. Lange, J.A. List, M.K. Price, and Nicholas Rupp (2006), "Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment," *Quarterly Journal of Economics*, 121(2): 747-782.**
- **Karlan, Dean and John A. List (2007) “Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment,” *American Economic Review*, 97(5): 1774-1793.**

## **4. “Behavioral” Economics**

### **A. Prospect Theory**

- **Summary: Knetsch, Jack L., Richard H. Thaler, Daniel Kahneman, "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives*, Vol. 5, No. 1. (Winter, 1991), 193-206.**
- Levitt, Steven D. and John A. List, “Homo economicus evolves,” *Science*, February 15, 2008, 319(5865), pp. 909-910.
- Coursey, Don, Hovis, John, and Schulze, William. “The Disparity Between Willingness to Accept and Willingness to Pay Measures of Value.” *Quarterly Journal of Economics*, 1987, 102(3), pp. 679-90.
- Knetsch, Jack L. "The Endowment Effect and Evidence of Nonreversible Indifference Curves" *American Economic Review*; 79(5), December 1989, 1277-84.
- Kahneman, Daniel; Jack L. Knetsch, and Richard H. Thaler, "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy*; 98(6), December 1990, 1325-48.
- Boyce, Rebecca R., Thomas C. Brown, Gary H. McClelland, George L. Peterson, and William D. Schulze (1992) “An Experimental Examination of Intrinsic

- Values as a Source of the WTA-WTP Disparity,” *American Economic Review*, 82:5 (December), 1366-1373.
- Bateman, Ian, Alistair Munro, Bruce Rhodes, Chris Starmer, and Robert Sugden, “A Theory of Reference-Dependent Preferences,” *Quarterly Journal of Economics*, 1997, 112(2): 479-505.
  - **List, John A. “Does Market Experience Eliminate Market Anomalies?” *Quarterly Journal of Economics*, 2003, February, 41-71.**
  - Haigh, Michael and List, John A. “Do Professional Traders Exhibit Myopic Loss Aversion? An Experimental Analysis,” *Journal of Finance*, (2005), 60 (1): 523-534.

## **B. Social Preferences**

- **Camerer, Colin and Richard Thaler, "Anomalies: Ultimatums, Dictators and Manners." *Journal of Economic Perspectives*, 9, 1995, 209-219.**
- **Fehr, Ernst, et al., "Does Fairness Prevent Market Clearing? An Experimental Investigation." *QJE*, May 1993, 437-59.**
- **Camerer, Colin F., and Ernst Fehr. 2004 “Measuring Social Norms and Preferences Using Experimental Games: A Guide for Social Scientists.”In *Foundations of Human Sociality: Economic Experiments and Ethnographic Evidence from Fifteen Small-Scale Societies*, eds. Joseph Henrich et al., 55–95. Oxford: Oxford University Press.**
- Kahneman, Daniel, Jack L. Knetsch and Richard H. Thaler, "Fairness as a Constraint on Profit Seeking: Entitlements and Markets." *AER*, 1986, 728-741.
- Prasnikar, Vesna and Alvin E. Roth, "Considerations of Fairness and Strategy: Experimental Data from Sequential Games." *QJE*, 1992, 865-88.
- Forsythe, Robert, J. Horowitz, N.E. Savin and Martin Sefton, "Fairness in Simple Bargaining Experiments." *GEB*, 1994, 6, 347-69.
- Eckel, Catherine C. and Philip Grossman, "Altruism in Anonymous Dictator Games," *GEB*, 16, 1996, 181-191.
- Fehr, Ernst, et al., "Reciprocity as a Contract Enforcement Device: Experimental Evidence." *Econometrica*, 65, 1997, 833-60.
- Glaeser, Edward L., David I. Laibson, Jose A. Scheinkman and Christine L. Soutter, "Measuring Trust." *QJE*, 2000, 811-846.
- Andreoni, James, Paul Brown and Lise Vesterlund, "What Makes the Allocation Fair? Some Experimental Evidence." *Games and Economic Behavior*, 40, July 2002, 1-24.
- Charness, G. and Rabin, M. 2002. “Understanding Social Preferences with Simple Tests,” *Quarterly Journal of Economics*, 117, 817-870.
- Fehr, Ernst and Bettina Rockenbach, “Detrimental effects of sanctions on human altruism, *Nature* 422, 15 March 2002, 137-140.
- Andreoni, James, William T. Harbaugh and Lise Vesterlund, "The Carrot or the Stick: Rewards, Punishments and Cooperation." *American Economic Review*, 93(3), June 2003, 893-902.
- Brown, Falk, and Fehr, “Relation Contracts and the Nature of Market Interactions,” *Econometrica*, 2004.

- A. Falk, E. Fehr, and U. Fischbacher (2008) “Testing Theories of Fairness - Intentions Matter,” *GEB*, 62(1): 287-303.
- Fehr, Ernst and List, John A. “The Hidden Costs and Returns of Incentives – Trust and Trustworthiness among CEOs,” *Journal of the European Economic Association* (2004), 2(5), 743-771.
- **Levitt, S. D. and J. List "What do laboratory experiments measuring social preferences tell us about the real world?" *Journal of Economic Perspectives*, (2007) 21(2): pp. 153-174.**
- **List, John A., “The Behaviorist Meets the Market: Measuring Social Preferences and Reputation Effects in Actual Transactions,” *Journal of Political Economy*, (2006), 114(1): 1-37.**
- Gneezy, Uri, and John A. List. “Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments,” *Econometrica*, (2006), September, 74(5): 1365-1384.
- List, John A. “On the Interpretation of Giving in Dictator Games,” *Journal of Political Economy*, (2007), 115(3): 482-494.

## 5. Field Experiments on the Economics of Education

- Angrist, J., D. Lang and P. Oreopoulos “Incentives and Services for College Achievement: Evidence from a Randomized Trial,” *American Economic Journal: Applied Economics* (2009) 1(1): pp. 1-xx.
- Angrist, J. and V. Lavy “The Effect of High School Matriculation Awards: Evidence from Randomized Trials,” IZA Discussion Paper No. 114 (2004).
- Banerjee, A.V., S. Cole, E. Duflo and L. Linden “Remedying Education: Evidence from Two Randomized Experiments in India,” *Quarterly Journal of Economics* (2003): pp. 1235-1264.
- Bettinger, E.P. “Paying to Learn: The Effect of Financial Incentives on Elementary School Test Scores” Working Paper (2008).
- Barrera-Osorio, F., M. Bertrand, L. Linden and F. Perez-Calle “Conditional Cash Transfers in Education: Design Features, Peer and Sibling Effects. Evidence from a Randomized Experiment in Columbia,” BREAD Working Paper (2008).
- Kremer, M., E. Miguel, and R. Thornton “Incentives to Learn,” Center for International Development Working Paper 109 (2003).
- Krueger, A.B. “Experimental Estimates of Education Production Functions,” *Quarterly Journal of Economics* (1999): pp. 497-532.
- Krueger, A.B. and Z. Pei “Another Look at the New York City School Voucher Experiment.” *American Behavioral Scientist* (2004). 45(5): pp. 658-698.
- Schultz, T.P. “School Subsidies for the Poor: Evaluating the Mexican Progresa Poverty Program,” *Journal of Development Economics*, (2004) 74(1): pp. 199-250
- **Fryer, Roland Financial Incentives and Student Achievement: Evidence from Randomized Trials, working paper, (2010).**
- **List, J., S. Levitt and S. Sadoff. “The Effect of Financial Incentives on High School Achievement: Evidence from a Randomized Experiment.” Working Paper (2009).**



## 6. Field Experiments on the Economics of Discrimination

- Ayres, Ian, and Peter Siegelman, "Gender and Race Discrimination in Bargaining for a New Car," *American Economic Review*, 1995, 85(3): 304-321.
- Neumark, David, R. Bank, and K. van Nort, "Sex Discrimination in Restaurant Hiring: An Audit Study," *Quarterly Journal of Economics*, 1996, 11(3): 915-941.
- Goldin, Claudia, and Cecilia Rouse, "Orchestrating Impartiality: the Impact of 'Blind' Auditions on Female Musicians," *American Economic Review*, 2000, 90(4): 715-741.
- **List, John A. "The Nature and Extent of Discrimination in the Marketplace: Evidence from the Field," *Quarterly Journal of Economics*, 2004, 119(1): 49-89.**
- **Bertrand Marianne, and Sendhil Mullainathan, "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *AER*, 2004, 94(4): 991-1013.**

## 7. Field Experiments in the Workplace

- **Bandiera, O., Barankay, I., Rasul, I., 2005. Social preferences and the response to incentives: Evidence from personnel data. *Quarterly Journal of Economics* 120(3), 917-962.**
- Al-Ubaydli, Omar, Andersen, Steffen, Uri Gneezy, and John List, 2008, "For Love or Money: Testing Pecuniary and Non-pecuniary Incentive Schemes in a Workplace," Working paper.
- **Hossain, Tanjim and John List, 2009, "The Behavioralist Visits the Factory: Increasing Productivity Using Simple Framing Manipulations," working paper.**
- Azfar, O., Zinnes, C., 2006. Which incentives work? An experimental analysis of incentives for trainers. IRIS Center, University of Maryland, College Park.
- Carpenter, Jeffrey and Erika Seki (2006) "Competitive Work Environments and Social Preferences: Field Experimental Evidence from a Japanese Fishing Community," *B.E. Journal of Economic Analysis & Policy*, 2006, 5(2): Contributions Article 2.<http://www.bepress.com/bejeap/contributions/vol5/iss2/art2>
- Fehr, E., Goette, L., 2007. Do workers work more if wages are high? Evidence from a randomized field experiment. *American Economic Review* 97(1).
- Gneezy, U., List, J., 2006. Putting behavioral economics to work: testing for gift exchange using field experiments, *Econometrica* 74, 1365-1384.
- Hamilton, Barton, J. Nickerson, and H. Owan, 2003, "Team Incentives and Worker Heterogeneity: An Empirical Analysis of the Impact of Teams on Productivity and Participation," *Journal of Political Economy* 111, 465-497.
- Schweiger, D., DeNisi, A., 1991. Communication with employees after a merger: A longitudinal field experiment. *The Academy of Management Journal* 34,110-135.
- **Agan, Amanda, Ameer Kamdar, Steven Levitt, and John A. List, 2009. "Using Experiments as a Screening Device," U. Chicago working paper.**

- Levitt, Steven and John A. List, 2008. Estimating the response of consumer demand to prices and giveaways: Evidence from naturally occurring data and a large-scale field experiment. Unpublished manuscript.

## 8. Field Experiments in Developing Countries

- Karlan, Dean. "Using Experimental Economics to Measure Social Capital and Predict Financial Decisions," *AER*, 2005, 95(5): 1688-1699.
- Ashraf, Nava, Dean S. Karlan and Wesley Yin (2006). "Tying Odysseus to the Mast: Evidence on Self and Spousal Control from the Philippines," *Quarterly Journal of Economics*, 121(2): 635-672.
- Banerjee, Abhijit, Shawn Cole, Esther Duflo, and Leigh Linden "Remedying Education: Evidence from Two Randomized Experiments in India," *Quarterly Journal of Economics*, 122(3):1235-1264, August 2007 (see also NBER Working Paper No. 11904, 2005; BREAD Working Paper No. 109.
- Kremer, Michael, Edward Miguel, and Rebecca Thornton, Incentives to Learn, 2008, working paper.
- Henrich, J., R. Boyd, S. Bowles, C. Camerer, E. Fehr, H. Gintis and R. McElreath (2001). "In search of homo economics: Behavioral experiments in 15 small-scale societies," *American Economic Review*, 91(2): 73-78.
- Andersen, Steffen, Erwin Bulte, Uri Gneezy, and John A. List, "Do women supply more public goods than men? Preliminary experimental evidence from matrilineal and patriarchal societies" *American Economic Review*, (2008) 98(2), pp. 376-381.
- Gneezy, Uri, Kenneth Leonard, and John A. List, "Gender Differences in Competition: Evidence from a Matrilineal and a Patriarchal Society," *Econometrica* (2009), forthcoming.

## 9. Experimental Economics in the Tube—Neuroeconomics

- Camerer, Colin; George Loewenstein; and Drazen Prelec. Neuroeconomics: How neuroscience can inform economics. *Journal of Economic Literature*, 2005, XLIII, 9-64.
- Harbaugh, William, Ulrich Mayr, Dan Burghart. "Neural Responses to Taxation and Voluntary Giving Reveal Motives for Charitable Donations." *Science*, June 15, 2007.
- Fehr, Ernst, Urs Fischbacher and Michael Kosfeld Neuroeconomic Foundations of Trust and Social Preferences, *American Economic Review* P&P.

Others, if we have time:

### 1. Risk and Uncertainty

- **Summaries:** Camerer, Colin, "Individual Decision Making" Chapter 8 in KR. Ch. 8 in DH.

- Rabin, Matthew; Thaler, Richard-H, "Anomalies: Risk Aversion" *Journal of Economic Perspectives*; 15(1), Winter 2001, pages 219-32.
- Tversky, Amos; Thaler, Richard H, "Anomalies: Preference Reversals" *Journal of Economic Perspectives*; 4(2), Spring 1990, pages 201-11.
- George Loewenstein, Richard H. Thaler, "Anomalies: Intertemporal Choice." *Journal of Economic Perspectives*, Vol. 3, No. 4. (Autumn, 1989), pp. 181-193.
- Ellsberg, D. "Risk, Ambiguity, and the Savage Axioms." *Quarterly Journal of Economics* 75 (1961): 643-69.
- Wakker, P. "Separating Marginal Utility and Probabilistic Risk Aversion." *Theory and Decision* 36 (1994): 1-44.
- Salo, Ahti A. and Martin Weber. "Ambiguity Aversion in First-Price Sealed-Bid Auctions" *Journal of Risk and Uncertainty*, September 1995, v. 11, iss. 2, pp. 123-37.
- Wakker, P. and D. Deneffe. "Eliciting Von Neumann-Morgenstern Utilities When Probabilities Are Distorted or Unknown." *Management Science* 42, no. 8 (1996): 1131-50.
- Fennema, H. and van Assen M. "Measuring the Utility of Losses by Means of the Tradeoff Method." *Journal of Risk and Uncertainty* 17, no. 3 (1999): 277-95.
- O'Donoghue, Ted and Matthew Rabin, "Doing it Now or Later." *AER*, 89(1), March 1999, pages 103-24., 2001, 121-160.
- Caplin, Andrew and John Leahy, "Psychological Expected Utility Theory and Anticipatory Feelings." *QJE*, 2001, 55-79.
- Laibson, David, "A Cue-Theory of Consumption." *QJE*, 2001, 81-119.
- O'Donoghue, Ted and Matthew Rabin, "Choice and Procrastination." *QJE*, 2001, 121-160.
- Ariely, Dan, George Loewenstein and Drazen Prelec "Coherent Arbitrariness: Stable Demand Curves without Stable Preferences," *Quarterly Journal of Economics*, 2003, February, 72-105.
- List, John A. and Michael Haigh. "A Simple Test of Expected Utility Theory Using Professional Traders," *Proceedings of the National Academy of Science* (2005), 102(3): 945-948.
- **Gneezy, Uri, John A. List, George Wu, "The Uncertainty Effect: When a Risky Prospect is Valued Less than its Worst Possible Outcome," *Quarterly Journal of Economics*, (2006), November 121(4): 1283-1309.**
- Harrison, Glenn W., John A. List, and Charles Towe (2007) "Naturally Occurring Preferences and Exogenous Laboratory Experiments: A Case Study of Risk Aversion," *Econometrica*, 75(2): 433-458.

## 2. Trade/Macro/Market Issues

- **Noussair, Charles, Charles Plott and Raymond Riezman. "An Experimental Investigation of the Patterns of International Trade," *American Economic Review*, June 1995, pages 462-491.**
- Noussair, Charles, Charles Plott and Raymond Riezman. "The Principles of Exchange Rate Determination in an International Finance Experiment," *Journal of Political Economy*, August 1997, pages 822-862.

- Lei, V. and C. Noussair, and Charles Plott, “Nonspeculative Bubbles in Experimental Asset Markets: Lack of Common Knowledge of Rationality vs. Actual Irrationality,” *Econometrica* Vol. 69(4), July 2001, pp. 813-59.
- Lei, V. and C. Noussair, “An Experimental Test of an Optimal Growth Model,” *American Economic Review*, Vol. 92, no 3, (June 2002), pages 549-570.
- **Fehr, Ernst, and J.R. Tyran. “Does Money Illusion Matter?” *American Economic Review* 91 (2001), 1239-1262.**

### 3. Behavioral Finance

- Alevy, Jon, Michael Haigh, and John A. List (2007) “Information Cascades: Evidence from a Field Experiment with Financial Market Professionals,” *Journal of Finance*, 62(1): 151-180.
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