

## **ECON 635**

### **Experimental Economics**

Syllabus - Fall 2015

**Course Description and Objectives:** This course will be an introduction to the methodology of experimental economics and its application to specific topics, such as decision making under uncertainty, auctions and public goods. In addition to learning about laboratory and field experiments, this course will also provide an introduction to the behavioral economics. An effort will be made to concentrate on *series* of experiments, in order to see how experiments build on one another and allow researchers with different theoretical dispositions to narrow the range of potential disagreement.

By the end of the semester, students will be able to:

- Explain the major issues involved in design and interpretation of economic experiments
- Demonstrate knowledge of how experimental economics has contributed to the economics literature in specific areas
- Explain the differences between behavioral economics and the traditional methods of analysis
- Write and present a literature review relevant to a specific experiment

The course will include reading and discussion of the economics literature on experiments. Students will be guided through the design, conduct, and analysis of experiments. Students will also be given detailed guidance on how to perform and present a literature review as part of a research project.

### **Instructors' Contact Information and Class Logistics:**

Office: Tydings 4101B

Email: [ozbay@umd.edu](mailto:ozbay@umd.edu)

Phone: 301-405-3184

Office Hours: TH 12:00-1:00pm

Class Lectures: Tuesdays and Thursdays, 2:00 – 3:15pm KEY 0124

Class Labs: some lecture periods will be spent conducting experiments in the Economics Department's facilities located in Tydings 4104.

Course Website: If you are registered for this course, you should use your directory ID and password to access [www.elms.umd.edu](http://www.elms.umd.edu). Copies of this syllabus, your grades, and other relevant documents will be made available through the course website.

Email: The University has adopted email as the primary means of communication outside the classroom, and I will use it to inform you of important announcements. Students are responsible for updating their current email address via <http://www.testudo.umd.edu/apps/saddr/>

Failure to check email, errors in forwarding email, and returned email due to “mailbox full” or “user unknown” will not excuse a student from missing announcements or deadlines.

You are encouraged to contact me by email, and I will do my best to respond within 24 hours. PLEASE include **ECON635** in the subject line, so that I can quickly distinguish your message from spam or other less important matters. PLEASE also include your name and any previous messages we’ve exchanged within every message you send to me.

### **Expectations of Students:**

You must participate in class discussions and in the lab experiments in order to succeed in the class. You are expected to read assigned journal articles and other materials (see list and schedule below) **before** we discuss them in class. If you find that you can’t follow the class discussions or understand the readings we have covered, please visit my office hours or make an appointment. If you anticipate or experience any problem fulfilling the requirements of the course, you must inform me as soon as possible to maximize the possibility that I can help you. Contacting me about such problems at the end of the term when your grade is lower than what you would like is definitely too late.

I look forward to receiving your feedback on the course at the end of the semester, so please use the University’s on-line course evaluation system at <https://www.courseevalum.umd.edu/> during the last two weeks of the semester.

Please contribute to a positive learning environment. We can make the most of this opportunity if you are willing to work at it. Students are expected to treat each other and me with courtesy and respect. Disruptive behavior will be referred to the Office of Student Conduct or the Campus Police.

### **Academic Integrity**

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards applicable to all undergraduate students, and you are responsible for upholding these standards as you complete assignments and take exams in this course. Please make yourself aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information see [www.studenthonorcouncil.umd.edu](http://www.studenthonorcouncil.umd.edu)

### **Students with Disabilities:**

I will make every effort to accommodate students who are registered with the Disability Support Services (DSS) Office and who provide me with a University of Maryland DSS Accommodation form.

### **Grades and Assignments:**

Your job during the semester is to read the assigned papers for each class period in detail, noting your questions and criticisms for the purpose of class discussion. Moreover, you must write a literature review as background research for an experiment. You will be asked to present your review in the class.

*In-class Participation:*

40% of your grade in this class will be based on how prepared you are for class and the extent to which you participate in class discussions—that is, the quality of your questions, answers, commentary, and criticisms in the classroom. Short class responses to key questions will be collected in nearly every class meeting, as they will give you opportunities to practice explaining the major points developed in the readings.

*Proposal:*

30% of your grade will be based on a proposal. Students will be expected to write a 10-15 page research proposal for an experiment. The proposal should have:

- i) Research question
- ii) Motivation
- iii) Related literature
- iv) Experimental design
- v) Hypotheses

*Student Presentations:*

During the last two weeks of the classes, all students will be expected to make a presentation that will constitute 30% of the overall grade. In the presentations, you are required to present the details of your literature review. If there is more than one student working on the same topic, they can make a joint presentation. If you miss your presentation with an excuse that complies with University policy, you may take a make-up exam. The four valid excuses according to University policy are medical conditions, religious observances, participation in University events at the request of University authorities, and compelling circumstances beyond your control. If you believe you need a make-up, please inform me as far in advance as possible by email. University policy requires that you provide appropriate documentation before you can be considered eligible for a make-up exam. If you miss your presentation and cannot document a valid excuse, your grade will be recorded as a zero.

Department of Economics' policy on grading requires instructors to use the grading system announced at the beginning of the semester in all cases and with no exceptions. There will be no opportunities for extra credit after the semester ends.

## Course Readings

As mentioned above, we will spend class time discussing selections from the economics literature on experiments. I will update this list based on the topics you are interested.

### Incentives:

- Gneezy, U., and A. Rustichini (2000). "Pay Enough or Don't Pay At All" *Quarterly Journal of Economics*, 791-810.
- Gneezy, U., and A. Rustichini (2000). "A Fine is a Price," *Journal of Legal Studies*, vol. XXIX, 1, part 1, 1-18.
- Ariely, D., U. Gneezy, G. Loewenstein and N. Mazar (2009). "Large Stakes and Big Mistakes." *Review of Economic Studies*, 76(2), 451-469.

### Behavioral Preferences, Eliciting Valuations

- Thaler, Richard (1987). "The Psychology of Choice and the Assumptions of Economics," in A.E. Roth, editor, *Laboratory Experimentation in Economics: Six Points of View*, Cambridge University Press.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1990). "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, 98, 6, 1325-1348.
- Kahneman, Daniel, Peter Wakker and Rakesh Sarin (1997). "Back to Bentham? Explorations of Experienced Utility", *Quarterly Journal of Economics*, 112(2), 375-405.
- Ariely, Dan, George Loewenstein and Drazen Prelec (2003). "Coherent Arbitrariness: Stable Demand Curves without Stable Preferences," *Quarterly Journal of Economics*, 118(1), 73-105.

### Individual Rationality: Guessing Games

- Nagel, Rosemarie (1995). "Unraveling in Guessing Games: An Experimental Study," *American Economic Review* 85(5), 1313-1326.
- Grosskopf, Brit, and Rosemarie Nagel (2008). "Rational Reasoning or Adaptive Behavior? Evidence from Two-Person Beauty Contest Games". *Games and Economic Behavior*, 62(1), 93-99.

- Ho, T-H., Camerer, C., and Weigelt, K. (1998) "Iterated Dominance and Iterated Best Response in Experimental P-Beauty Contests," *The American Economic Review*, 88 (1998), 947-969.

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#### Multiple Equilibria

- Van Huyck, Battalio and Beil (1993). "Asset Markets as an Equilibrium Selection Mechanism: coordination failure, game form auctions, and forward induction." *Games and Economic Behavior*, 5(3), 485-504.
- Van Huyck, Battalio and Beil (1991). "Strategic Uncertainty, Equilibrium Selection, and Coordination Failure in Average Opinion Games," *Quarterly Journal of Economics*, 106(3), 885-911.
- Van Huyck, Battalio and Beil (1990). "Tacit Coordination Games, Strategic Uncertainty, and Coordination Failure," *American Economic Review*, 234-248.

#### Public Goods

- Barron, Greg, & Yechiam, Eldad (2002). "Private Email requests and the diffusion of responsibility." *Computers In Human Behavior*. 18(5), 507-520.
- Ledyard, John O. (1995). "Public Goods: A Survey of Experimental Research." In *A Handbook of Experimental Economics*. ed. A. Roth and J. Kagel, 111-194. Princeton: Princeton University Press.
- Marwell, Gerald, and Ruth E. Ames (1979). "Experiments on the Provision of the Public Goods I: Resources, Interest, Group Size, and the Free-Rider Problem." *American Journal of Sociology*, 84(May): 1335-1360.
- Marwell, Gerald, and Ruth E. Ames (1980). "Experiments on the Provision of Public Goods II: Provision Points, Stakes, Experience and the Free-Rider Problem." *American Journal of Sociology*, 85(January): 926-937.
- Isaac, R. Mark, and James M. Walker (1988). "Group Size Hypotheses of Public Goods Provision: The Voluntary Contributions Mechanism." *Quarterly Journal of Economics*, 103(February): 179-200.

Strategic Interactions and Learning

- Roth, Alvin E. and J. Keith Murnighan (1978). "Equilibrium Behavior and Repeated Play of the Prisoner's Dilemma," *Journal of Mathematical Psychology*, 17, 189-198.
- Dal Bó, Pedro (2005). Cooperation under the Shadow of the Future: experimental evidence from infinitely repeated games, *American Economic Review*, 95(5), 1591-1604.
- Bereby-Meyer, Yoella and Alvin E. Roth (2006). "Learning in Noisy Games: Partial Reinforcement and the Sustainability of Cooperation," *American Economic Review*, 96(4), 1029-1042.
- Erev, Ido and Haruvy, Ernan (2012) "Learning and the Economics of Small Decisions," To appear in the second volume of "The Handbook of Experimental Economics" edited by John H. Kagel and Alvin E. Roth.
- Erev, I. and Roth, A. (1998). Predicting How People Play Games: Reinforcement Learning in Experimental Games with Unique Mixed Strategy Equilibria. *American Economic Review*, 88, 848-881.
- Nyarko, Y. & Schotter, A. (2002). An Experimental Study of Belief Learning Using Elicited Beliefs. *Econometrica*, 70, 971-1006.
- Wilcox, N. (2006). Theories of learning in games and heterogeneity bias. *Econometrica*, 74:1271-1292.

Punishment

- Fehr, Ernst and Simon Gächter (2000) "Cooperation and Punishment in Public Goods Experiments", *American Economic Review* 90(4), 980-994.
- Fehr, Ernst and Simon Gächter (2002) "Altruistic punishment in humans." *Nature* 415, 10 137-140.
- Herrmann, Benedikt, Christian Thoni, and Simon Gächter (2008). "Antisocial Punishment Across Societies" *Science* 319(7), 1362-1367.

Bargaining games, Fairness

- Roth, A.E. and Malouf, M.K. (1979). "Game-Theoretic Models and the Role of Information in Bargaining", *Psychological Review*, 86, 574-594.

- Roth, A.E. and Murnighan, J.K. (1982). "The Role of Information in Bargaining: An Experimental Study," *Econometrica*, 50, 1123-1142.
- Roth, Murnighan and Schoumaker, (1988). "The Deadline Effect in Bargaining: Some Experimental Evidence," *American Economic Review*.
- Roth, A.E. and Schoumaker, F. (1983). "Expectations and Reputations in Bargaining: An Experimental Study", *American Economic Review*, 73, 362-372.
- Babcock, Loewenstein, Isacharoff and Camerer (1995), "Self-Serving Bias and Bargaining Impasse" *American Economic Review*.
- Babcock, Linda, Xianghong Wang and George Loewenstein (1996). "Choosing the wrong pond: Social Comparisons in negotiations that reflect a self-serving bias," *Quarterly Journal of Economics*.
- Guth, Werner, Rolf Schmittberger und Bernd Schwarze (1982). "An experimental analysis of ultimatum bargaining", *Journal of Economic Behavior and Organization* 3(4), 367-388.

#### Trust Game, Best Shot Game

- Berg, J Dickhaut. and K. McCabe (1995). "Trust, Reciprocity and Social History," *Games and Economic Behavior*.
- Harrison, Glenn W. and Jack Hirshleifer (1989). "An Experimental Evaluation of Weakest Link/Best Shot Models of Public Goods," *Journal of Political Economy*, 97, 1989, 201-225.
- Prasnikar V. and Roth, A.E. (1992). "Considerations of Fairness and Strategy: Experimental Data From Sequential Games," *Quarterly Journal of Economics*, 865-888.

#### Auctions:

- Kagel, J. 1995. "Auctions: A survey of experimental research." In *Handbook of Experimental Game Theory*, ed. J. Kagel and A. Roth. Princeton: Princeton University Press.
- Kagel, John H., and Dan Levin. 1993. "Independent Private Value Auctions: Bidder Behavior in First-, Second- and Third-Price Auctions with Varying Number of Bidders." *Economic Journal*, 103: 868-879.
- Peter Cramton, Emel Filiz Ozbay, Erkut Ozbay and Pacharasut Sujarittanonta. "Discrete Clock Auctions: An Experimental Study".

- Kagel. John H., and Dan Levin. 1986. "The Winner's Curse and Public Information in Common Value Auctions." *American Economic Review*, 76(5 Dec): 894-920.

Behavioral Economics:

- Andreoni, James and B. Douglas Bernheim. 2009. "Social image and the 50-50 norm: A theoretical and experimental analysis of audience effects." *Econometrica*, 77(5): 1607-1636.
- Filiz Ozbay, Emel, and Erkut Ozbay 2007. "Auctions with Anticipated Regret: Theory and Experiment." *American Economic Review*, 97(4): 1407-1418.
- Filiz Ozbay, Emel, and Erkut Ozbay. "Social Image in Public Goods Provision with Real Effort."
- Andreoni, James. 1990. "Impure altruism and donations to public goods: A theory of warm-glow giving." *Economic Journal*, 100: 464-477.

Suggested Textbooks

**Friedman and Sunder.** 1994. *Experimental Methods: A Primer for Economists*. Cambridge.

**Kagel and Roth.** 1995. *The Handbook of Experimental Economics*. Princeton.

**Friedman and Cassar.** 2004. *Economics Lab: An Intensive Course in Experimental Economics*. Routledge.

**Davis, D. and Holt, C.** 1992. *Experimental Economics*. Princeton University Press.

**Guala.** 2005. *The Methodology of Experimental Economics*. Cambridge University Press