

Experimental/Behavioral Economics: Econ 8875  
Fall 2017

318 Arps Hall: Tue, Thur 11:10- 12:30

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Office Hours: Before or after class and by appointment

Increasingly economists have come to question the assumptions that underlie much of economics. Drawing heavily on cognitive psychology, economists have realized that individuals might not be quite as rational and self-centered as the theory assumed. Seeking an empirical basis for more realistic assumptions about human behavior and decision-making, economists have turned to controlled laboratory experiments. The resulting work has significantly impacted how economists think about individual decision-making, game theory, and behavior within markets. (The impact of economic experiments on the field became especially clear when Vernon Smith and Danny Kahnemann shared the Nobel Prize in the fall of 2002.) Experiments have also allowed economists to improve their ability to engineer better functioning institutions and markets.

In this class, you will be learning about the techniques and results of experiments in economics. We cannot possibly cover the full range of applications in a one-semester course so will pick and choose among a variety of topics (see the syllabus below). Students will participate in an occasional classroom experiment with a structure similar to, or identical to, the experiments you will be reading about. To facilitate this, all classes will be held in the Economics Lab in 318 Arps Hall. Participating in the classroom versions of the experiments we will be reading about is an important part of the course and requires specifying the number of participants in advance. As such you should plan on showing up *on time* for class.

Grades will be based on classroom participation in discussing the readings and the completion of an experimental project proposal. You can have up to 2 students on a joint project. These may form the basis for a 3<sup>rd</sup> or 4<sup>th</sup> year paper.

The experimental project proposal will work as follows: The objective here is to think through an experiment that you would like to run. To go through the whole process of identifying an economics related question of interest that can be investigated using experimental methods and outlining how you would attack the problem (specifying the broad outline of an experimental design). You will then write up a “research proposal.” Find a substantive area of economics you are interested in and begin discussing your topic with me. *You must receive approval for your project by 11/1 at the latest (and hopefully much*

*earlier*). You will then review the experimental and empirical literature on the topic (we will help you to identify the relevant research) and begin to specify an experiment that will fill a hole in the existing literature. At the end of the quarter you will present your proposals in class (about a 30 minute presentation). You will receive feedback on your proposal and then submit a revised proposal by the date of the final exam (or a little later for those presenting during finals week). (There is no final exam for this class – your research proposal is your “final”.) Written proposals will be between 5 and 10 pages. In the past many of these proposals have turned into chapters in students’ dissertations. Feel free to discuss these projects with your advisors or members of your dissertation committee.

As part of class participation students will be expected to keep up with the readings on a weekly basis. For each week’s readings we will expect you to comment on one of the articles as to: What are the main points/contribution of the article as *you* see it. What extensions/ additional issues would move research forward? That is, what pertinent questions are left unanswered? What questions do you have/did not understand from the article. These reports do not have to be overly long (1 or 2 pages) but (i) we expect to receive them by noon on the Wed before class and (ii) to be substantive in nature as they will form the basis for classroom discussion as well as letting us know where you are having trouble understanding the material. You will send these to Kirby Kempe Nielsen [kirbykempe@gmail.com](mailto:kirbykempe@gmail.com) who will collate the comments and send them out via the class distribution list prior to the 2<sup>nd</sup> day (typically a Thursday) of covering a topic. (These comments need to get to Kirby the day before the 2<sup>nd</sup> class by 5PM. If you miss this deadline plan to distribute your comments to the class distribution list directly. ) Don’t be bashful in terms of asking questions – you will typically be doing a service for you classmates as many of them will have the same questions. Also it’s OK to be “wrong” – that’s often when one learns the most. You can’t be afraid of being “wrong” to do research.

One thing we want to emphasize in this class is the logic behind a proposed experiment – what motivated it and what did the paper hope to uncover. That is, in economics we don’t do experiments simply because they have never been done before – but it needs to be motivated by theory (a dialogue with theorists), following up on what’s missing in a previous experiment (experimenters figuring out the limits of previously reported results in the literature), or by a policy issue. This is especially important as I have found too many students just jumping into a topic without determining how it is intended to fit into the literature. (I will try and make this clear in introducing topics/papers that we cover.)

## Readings

It is very difficult to find a single simple source of readings that I am happy with. So what I have tried to do is to use the Handbook of Experimental Economics (1995) and the Handbook of Experimental Economics, vol 2 (2016) as much as possible for overviews of topics (both edited by Kagel and Roth, Princeton Un Press – referred to as vol 1 and vol 2). (The chapters from vol 2 are posted on my web site <http://www.econ.ohio-state.edu/kagel/http://www.econ.ohio-state.edu/kagel/>) I have also included original source readings and additional suggested readings and, of course, you are free to browse the sections of the Handbook(s) that we do not cover. Required readings will have a \* next to them. There may be additions to the readings as we get closer to the week in which they will be covered. Any journal articles can be accessed through either Jstor, or OSU online serials, or the author's web site. Some of the articles may look "old" in terms of date of publication. However, these are typically foundational papers.

There are several other books that you may want to look at that will put on reserve in the library.

Davis, D. and Holt, C. *Experimental Economics*, Princeton University Press, 1993.

Camerer, C. *Behavioral Game Theory*, Princeton University Press, 2003.

Roth, A. E. (ed.) *Laboratory Experimentation in Economics: Six Points of View*, Cambridge University Press, 1987.

## Schedule

### **Week 1: 8/22-8/24 Competitive Markets (double auction and posted market mechanisms).**

\*Handbook (vol 1): Introduction: pp13-16 & 49-58 (types of economic experiments)  
Holt chapter: pp. 355-60; 368-73

Additional reading: V. L. Smith, "Markets as Economizers of Information: Examination of the 'Hayek Hypothesis'," Economic Inquiry, 20, 165-179, 1982.

Mestelman and Welland, Economic Theory, 1994, pp 105-129 Double auction and posted price markets with advance production.

Phillips et al., Laboratory Behavior in Spot and Forward Markets, Experimental Economics, 2001, 4 (3), 241-56.

Gode, D. K. and Sunder, S., Allocative efficiency if Markets with Zero –Intelligence Traders, Journal of Political Economy, 1993, 101 (1), pp. 119-37.

Hong and Plott, "Rate filing policies for inland barge transportation," Bell Journal of Economics, 1982 (using an experiment to address a public policy issue)

## **Week 2: 8/29-8/31 Market Power, Posted Price Markets and Mergers**

\*Handbook (vol 1): Holt chapter: pp. 377-381 (monopoly); pp. 391-398; pp. 406-409;

Holt, Lang and Villameal, Market Power in Double Auction Markets, Economic Inquiry, Jan 1986.

\*Davis and Holt, "Market Power and Mergers in the Laboratory: Experiments with Posted Prices," RAND Journal of Economics, Autumn 1994.

Additional reading: Davis, D. and Williams, A., "The Hayek Hypothesis in Experimental Auctions: Institutional Effects and Market Power," Economic Inquiry, 1991, 29, 261-74.

Davis and Holt, "Conspiracies and Secret Price Discounts," Economic Journal, May 1998.

Mestelman and Welland, "Inventory Carryover and the Performance of Alternative Market Institutions", Southern Economic Journal, Vol. 57, No. 4, April 1991, 1024-42

## **Week 3: 9/5-9/7 Public Goods and Charitable Giving**

\*Handbook (vol 1): Ledyard chapter: pp. 111-113 through "A simple public goods experiment"); pp. 121-122; pp. 134-155 & 169-173.

Handbook (vol 2): Vesterlund: "Using Experimental Methods to Understand Why and How We Give to Charity"

Suggested additional readings:

\*Isaac, M and Walker, J. "Group size effects in public goods provision: The voluntary contribution mechanism," Quarterly Journal of Economics, 103, Feb.1988.

Isaac, M., J. Walker and A. Williams "Group size and the voluntary provision of public goods: Experimental evidence using very large groups," Journal of Public Economics, 54, 1994.

Fehr, Ernst, and Simon Gächter. "Cooperation and punishment in public goods experiments." The American Economic Review 90, no. 4 (2000): 980-994.

Herrman H., Christian, T., and Gächter, S. (2008) "Antisocial punishment across societies" Science vol 319: 1362-1367.

Baranski, Andrzej (2016) "Voluntary contributions and collective redistribution" AEJ: Micro, 8 (4), 149-173.

## **Week 4: 9/12-9/14 Other-Regarding Preferences**

*Fairness:*

\*Handbook (vol 1): Roth chapter: pp. 256-260; 270-271 (up to the Binmore et al experiment); 274-288.

\*Handbook (vol 2): Cooper and Kagel chpt: "Other Regarding Preferences: A Survey of Experimental Results," read Section II and Section III parts A, D, E, F, I, and L.

Additional readings: Fehr, E. and Schmidt, K. (1999) "A theory of fairness, competition and cooperation," *Quarterly Journal of Economics*, 114, 817-868.

Bolton, G. and Ockenfels, A. (2000). "ERC: A theory of equity, reciprocity and competition," *American Economic Review*, 90, 166-193.

Bohnet, I. & Frey, B. S. (1999). Social distance and other-regarding behavior in dictator games: Comment. *American Economic Review*, 89, 335-339.

*Gift Exchange:*

\*Cooper, D. and Kagel, J. (vol 2) "Other regarding preferences: A Survey of Experimental Results." Section IV parts A, C, E, F, and G.

Fehr, E., Kirchsteiger, G. and Riedl, A. "Gift Exchange and Reciprocity in Competitive Experimental Markets" *European Economic Review*, 1998, vol 42, pp. 1-34. (This is a summary of Fehr's work on experimental labor markets).

Feliz-Ozbay, Ham, Kagel, and Ozbay (in press) "The Role of Cognitive Ability, Personality Traits and Gender in Gift Exchange Outcomes" *Experimental Economics*.

### **Week 5: 9/19-9/21 Signaling Games, Learning and Learning Transfer**

\*Read one of the following:

Cooper, D. J., Garvin, S. and Kagel, J. "Adaptive Learning versus Equilibrium Refinements in an Entry Limit Pricing Game," *Economic Journal* 107 (1997)

\_\_\_\_\_ "Signalling and Adaptive Learning in an Entry Limit Pricing Game," *RAND Journal of Economics* 28, 1997.

Additional readings:

\*Cooper, D. and Kagel, J. (2005), "Are two heads better than one? Team versus individual play in signaling games" *American Economic Review*, 95, 477-509.

Cooper, D. and Kagel, J. (2009) "The Role of Context and Team Play in Cross-Game Learning" *Journal of the European Economic Association*, vol 7, pp. 1101-1139.

Suggested additional readings (most of these are from the psychology literature dealing with learning generalizability):

Cooper, D. and Kagel, J. (2016) "A failure to communicate: An experimental investigation of the effects of advice on strategic play" *European Economic Review*, 82, 24-45.

Salomon, Gavriel and Perkins, David N. (1989). "Rocky Roads to Transfer: Rethinking Mechanisms of a Neglected Phenomenon." *Educational Psychologist*, 24(2), 113-42.

Kerr, N. L. and Tindale, R. S. (2004) "Group performance and decision making," *Annual Review of Psychology*, 55, 623-55.

Gigerenzer, G., & Hug, K. (1992). Domain-specific reasoning: Social contracts, cheating, and perspective change. *Cognition*, 43, 127-171.

Johnson-Laird, P. N. (1999). "Deductive Reasoning," *Annual Review of Psychology*, 50, 109-135.

### **Week 6: 9/26-9/28: Games**

*PD Games:*

\*Dal Bo and Frechette (2011), "The evolution of cooperation in infinitely repeated games" *AER* 101(1): 411-429

or

\*\_\_\_\_\_ (in press) "On the determinants of cooperation in infinitely repeated games: a survey" *J. of Economic Literature*. [http://cess.nyu.edu/frechette/print/Dal\\_Bo\\_2016a.pdf](http://cess.nyu.edu/frechette/print/Dal_Bo_2016a.pdf)

Embrey, Frechette, and Yuksel (in press) "Cooperation in the Finitely Repeated Prisoner Dilemma" *Quarterly Journal of Economics* (can be found on Frechette's web site).

Kagel and McGee (2016) "Team versus individual play in finitely repeated PD games." *AEJ Micro* 8 (2).

*Coordination Games:* Read at least one of the following

Cooper et al. (1990) "Selection criteria in coordination games: some exp results", *AER* 80 (1):218-233.

Van Huyck et al (1990) "Tacit coordination games, strategic uncertainty and coordination failure" *AER* 80(1): 234-248.

Cachon and Camerer (1996) "Loss avoidance and forward induction in experimental coordination games" *QJE* 111(1): 165-94

Duffy (vol 2) "Macroeconomics: A survey of experimental research" in Handbook, vol 2 Section 3 "Coordination problems".

### **Week 7 10/3-10/5: Auctions – Private value and Common Value**

I will cover investigations of revenue equivalence in single unit private value auctions and the winner's curse in common value auctions. But feel free to read whatever seem interesting to you.

\*Kagel, J. (vol 1) "Auctions: A survey of Experimental Research" Focus here will be on investigations of the revenue equivalence theorem in private value auctions and initial results on the winner's curse in common value (CV) auctions.

\*Kagel and Levin (vol 2) "Auctions: A survey of experimental research" Focus on single unit common value (mineral rights) auctions.

Additional Reading:

Levin, D, Peck, J. and Ivanov, A. (2016) “Separating Bayesian updating from non-probabilistic reasoning: An experimental investigation” *AEJ: Micro* 8 (2)

*Note 10/12 is the Fall semester break – 10/19 I will be at an out of town conference (no class both days).*

### **Week 8: 10/10-10/17 Gender**

\*Gneezy, Niederle and Rustichini (2003) “Performance in Competitive Environments: Gender Differences”, *Quarterly Journal of Economics*.

\*Babcock et al. (2017). “Gender differences in Accepting and Receiving Tasks with Low Promotionability” *American Economic Review*, 107 (3), 714-747.

Niederle (vol 2) “Gender” in Handbook of Experimental Economics.  
“Do Women Shy Away from Competition?” Niederle and Vesterlund, *Quarterly Journal of Economics*, 2007.

Coffman, Katherine. 2014. “Evidence on self-stereotyping and the contribution of ideas” *Quarterly Journal of Economics* 129 (4) 1625-60.

Niederle, Segal and Vesterlund 2013. “How Costly is Diversity? Affirmative Action in Light of Gender Differences in Competitive Attitudes,” *Management Science*, 59, 1-16.

### **Week 9: 10/24-10/26: Political Economy**

Palfrey (vol 2) “Experiments in political economy”.

\*Frechette et al. (2005) “Nominal Bargaining Power, Selection Protocol, and Discounting in Legislative Bargaining” *Journal of Public Economics*, vol 89, 2005

\*Frechette et al. (2005): “Behavioral Identification in Coalitional Bargaining: An Experimental Analysis of Demand Bargaining and Alternating Offers,” *Econometrica*, vol 73 (6), November 2005.

Christiansen, Nels, Georganeous, Sotiris, Kagel, John. “Coalition formation in a Legislative Voting Game” *AEJ: Microeconomics*, 2014, vol 6 (1), pp. 182-204.

Baranski and Kagel (2015). “Communication in Legislative Bargaining” *Journal of the Economic Science Association*, 1 (1), 59-72.

### **Week 10: 10/31-11/2: Market Design**

\*Roth, A. “What have we learned from market design” *Economic Journal*, March 2008, 285-310 (introduction and overview of the topic).

\*Roth, A. (vol 2) “Experiments in market design” (read at least one section of this covering one mkt design case).

Additional readings:

Niederle and Roth, "Market culture: how rules governing exploding offers affect market performance," *American Economic Journal: Microeconomics*, 2009, 199-219.

### **Week 11: 11/7-11/9 Moral Decision Making**

Hamman J, Loewenstein G & R Weber (2010). Self-Interest Through Agency. *American Economic Review*.

Dana J, Cain D & Dawes R (2006). What You Don't Know Won't Hurt Me. *Organizational Behavior and Human Decision Processes*.

Dana J, Weber R & Kuang X. Exploiting Moral Wiggle Room. *Economic Theory*.

Suggested additional readings:

Fehr E, Hart O & C Zehnder (2010). Contracts as Reference Points: Experimental Evidence. *American Economic Review*.

Coffman L (2011). Intermediation Reduces Punishment (and Reward). *American Economic Journal: Microeconomics*.

Roth A (2007). Repugnance as a Constraint on Markets. *Journal of Economic Perspectives*.

### **Week 12 11/14- 11/16 Discrimination/Influence and Persuasion**

*Discrimination:* Read one of the Following

\*Bertrand, Marianne and Sendhil Mullainathan (2004) "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination" *American Economic Review*, 94(4): 991-1013.

\*Ayres, Ian, and Peter Siegelman. "Race and gender discrimination in bargaining for a new car." *The American Economic Review* (1995): 304-321.

Golden, C. and Rouse, C. 2000. Orchestrating Impartiality: The impact of "Blind" Auditions on Female Musicians, *Am. Econ. Review*, September, pp. 715-755.

Heckman, James J. "Detecting discrimination." *The Journal of Economic Perspectives* 12.2 (1998): 101-116. (a critique of field studies).

<http://freakonomics.com/podcast/the-true-story-of-the-gender-pay-gap-a-new-freakonomics-radio-podcast/>

*Influence and Persuasion:* Read one of the following

Charness, G and Dufwenberg, M. 2006. "Promises and Partnerships" *Econometrica* 74 (6), 1579-1601.

Nielson et al. 2017. "Teams Promise but Do Not Deliver" working paper, Ohio State University.  
[http://econ.ohio-state.edu/kagel/Promises\\_Teams\\_all.pdf](http://econ.ohio-state.edu/kagel/Promises_Teams_all.pdf)

**11/21 No class – Thanksgiving week.**

**11/28-12/5 Student Presentations**

*Academic integrity* is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. It is expected that all students at The Ohio State University have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination.

Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If we suspect that a student has committed academic misconduct in this course, we are obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

The Committee on Academic Misconduct web pages ([oaa.osu.edu/coam/home.html](http://oaa.osu.edu/coam/home.html))

**Students with Disabilities Contact Information:**

"Any student who feels he/ she may need accommodation based on the impact of a disability should contact the instructor privately to discuss your specific needs. Please contact the Office for Disability Services at 614/ 292-3307 in 150 Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities."