Designing and Conducting Experiments in the Laboratory

July 17-21, 2017

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<tr>
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Course Objective:

This course is intended to teach participants to design and run their own experiments. The course material also develops the role and place of experiments in the social sciences. Experiments are one of the tools available for research in the social sciences, one that plays an increasingly prominent role in economics and political science. While our emphasis is on economics-style incentivized experiments, much of the course is also important for other types of experiments commonly used in the social sciences.

There are three goals for the course. The first is to teach key elements of experimental design and data analysis. The second is to familiarize students with the experimental literature, including the canonical games most often used in lab experiments, and the important connection between theory development and experiments. Third, we discuss the uses and limitations of different types of experiments in the lab and the field, including randomized controlled trials.

To learn about experiments, there is no substitute for doing, so participants will work in small groups to design an experiment that will be piloted in the workshop. This means participants will "get their hands dirty" conducting an experiment. To this end, we will likely spend some time outside of class (evening times) in order to refine our experiments. Time permitting, the experiments will be run on the last day of class and afterwards the class will offer a critique.

COURSE OUTLINE: READINGS

Note: *Papers that should be read beforehand. Papers in red should be read for their design and potentially fatal flaws.
Monday – July 17th

9:00-12:00 pm. Introduction to Experimental Design


Methodological questions:


Interesting new directions:


**1:00 - 3:30 pm. Canonical Games.**


*"When Less Is More …" (2016) – Anonymous manuscript.*

* For some of the original articles, see:


3:30 – 5:00 pm. Hands on – brainstorming and group production

OBJECTIVES: Students will work to begin planning an experiment. The emphasis will be on replication.

Tuesday – July 18th

9:00-12:00 pm. Institutions and Markets.


*TBA – flawed paper

Other interesting work:


Video on Kidney Matching [https://www.nap.edu/read/23508/#video](https://www.nap.edu/read/23508/#video)

1:00-3:30 Labor


1-17.


*'Testing the Hard Case ..." (2017) - – Anonymous manuscript.

*Other interesting articles


3:30 - 5:00 pm. Experimental Design – group projects

OBJECTIVES: This time will be used to continue planning for experiments.

Wednesday – July 19th

9:00-12:00. Heterogeneity. Dimensions of individual heterogeneity including preferences (altruism, risk, time and competitiveness), gender, and income (poverty).


*Cadsby, Charles Bram and Elizabeth Maynes. 1998. "Choosing between a Socially Efficient

**Other Interesting Articles:**


Habib, Sameh; Daniel Friedman; Sean Crockett and Duncan James. 2017. "Payoff and Presentation Modulation of Elicited Risk Preferences in Mpls." *Journal of the*
1:00 – 3:30 pm. **Survey Experiments**: Design; Value; Cautions.


**"Citizen Perceptions …" (2016) – Anonymous manuscript.**

**Other interesting articles:**


3:30 - 5:00 pm. **Experimental Design – group projects**

**OBJECTIVES:** This time will be used to continue planning for projects.

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**Thursday – July 20th**

9:00-12:00. **Lab-in-the-field and Field experiments**


**"Ballot Secrecy …" (2016) – Anonymous manuscript.**
Other interesting papers.


Coppock, Alexander and Donald P. Green. 2014. "Assessing the Correspondence between Experimental Results Obtained in the Lab and Field: A Review of Recent Social Science Research." *Political Science Research and Methods*, 3(1), 113-31.


1:00 – 3:30 pm. IRBs, Pre-Registration, Writing Up, Reporting Results, Replication

**OBJECTIVES:** Discussion of what happens on the way to carrying out an experiment. Strategies for ensuring you have a paper to write up. Publicizing your work.


*"Improving Civic Trust ..." (2017) – Anonymous manuscript.
Other interesting articles:


Montgomery, Jacob M.; Brendan Nyhan and Michelle Torres. 2017. "How Conditioning on Post-Treatment Variables Can Ruin Your Experiment and What to Do About It," Washington University,


Camerer, Colin F; Anna Dreber; Eskil Forsell; Teck-Hua Ho; Jürgen Huber; Magnus Johannesson; Michael Kirchler; Johan Almenberg; Adam Almtejed and Taizan Chan. 2016. "Evaluating Replicability of Laboratory Experiments in Economics." Science, 351(6280), 1433-36.


3:30 - 5:00 pm. Experimental Design – individual and group projects

Friday – July 21st

9:00-12:00. Class Experiments: Groups are expected to run their experiments with classmates as subjects. Classmates will provide feedback.

1:00 – 5:00 pm. Class Experiments, contd.