Course Description

Researchers in comparative politics, American politics, international relations, political methodology, and political theory increasingly rely on data collected from various types of experiments to answer important questions in their fields. This class is designed to introduce students to experimental techniques and the applications of experiments in political science. In addition to learning the techniques, we will discuss generalizability, usefulness, and ethical issues surrounding experiments. While this is primarily a seminar course, we will cover statistical material and get a hands-on introduction to programming tools for experimental research in R. This course is not specific to a particular subfield; we will cover a wide range of experimental methods (lab experiments, field experiments, surveys, etc.) used across different research areas.

Prerequisites

This is a graduate-level course. This course assumes a familiarity with probability theory, statistical and causal inference, and R. Students who take this course should have completed Probability and Inference (PSC 404), Linear Models (PSC 405), and Causal Inference (PSC 504). I am happy to consider exceptions but please be aware that (1) problem sets are a part of the course and (2) I will not be reviewing the fundamentals of working with R, regression, or causal inference explicitly during class.

Class Structure

This class is designed to prioritize structured discussion over lecture. Student discussants will introduce weekly topics and guide discussion during most class sessions. I will start discussion with a brief review during some of the methods weeks and make the corresponding lecture notes available on the course website.
Discussants

Everyone in the class must sign up to serve as a discussant for at least one class meeting. The student discussant for each class session will:

1. Introduce and summarize the readings
2. Raise questions for discussion by the rest of the class
3. Initiate and guide the discussion in class

Assignments

Final grades for the course will be based on:

**Class Participation (15%)**: In-class discussion is an important part of this course, and students are expected to contribute regularly to the conversation. Participation can take a variety of forms, including (but not limited to): serving as discussants for class sessions, asking questions of me or other students in the class, answering questions I pose in class, answering questions posed by other students, or offering commentary on course materials. Quality is more important than quantity.

**Problem Sets (15%)**: You will complete two problem sets over the course of the semester. These problem sets are not designed to be punishing, but they will guide you through some useful experimental design and analysis exercises and provide you with exposure to some R tools for experiments.

**Final Project (70%)**: The purpose of this course is to get you started on your own experiments. Accordingly, the capstone project for this class will be a final paper based on an experiment that you design and implement (at minimum, in pilot form) during the semester. You may have to work in teams depending on enrollment. In order to give you a chance to get feedback in the design stage as well as the analysis stage of your final project, you will turn in your final projects in the following stages:

- Research Design Memo and Presentation (10%): You will submit a short (1-2 page) memo summarizing your research design and your plan for analyzing your data. Think of this as a preregistration memo. We will likely present these in class to give you workshop-style feedback on your ideas.
- Final Paper (45%): Every student (or group) must submit a final write-up of their experiment, including: an introduction to the research question and contribution, a detailed description of the research design, a summary of the data, analysis and results, any relevant robustness checks, and a discussion of the results and their limitations.
- Final Paper Presentation (15%): You will present your results to the class during the last two class sessions.
- IRB: Please note that you must complete your IRB certification and have the protocol for your experiment approved by the IRB before you begin running your experiment.
Academic Honesty

I wholeheartedly encourage collaboration. You may work together on the problem sets, but every student must submit individual solutions and code. Copying publicly available solutions wholesale violates the spirit of this course and this program.

Resources

If there are accommodations of any sort that would make the class work better for you, please come talk to me about it.

If you think you may need to seek accommodations due to a disability, the Office of Disability Resources (http://www.rochester.edu/college/disability/index.html) can help you figure out your options. Speaking with faculty about disability-related accommodations is strictly confidential; I encourage you to come see me with concerns or requests.

Other resources that may prove helpful during your time at the University of Rochester:

- CARE (https://www.rochester.edu/care/about.html).
- The Writing & Speaking Center (http://writing.rochester.edu/index.html)
- Tutoring (http://www.rochester.edu/college/cetl/undergraduate/tutoring.html)
- University Counseling Center (http://www.rochester.edu/uhs/ucc/)
- David T. Kearns Center (https://www.rochester.edu/college/kearnscenter/)
- Office of Minority Student Affairs (http://www.rochester.edu/College/OMSA/)

Required Readings

Most readings for this course will be made available in electronic form on the course website. We will be reading excerpts from the following books in class; these can be purchased online via Amazon.com and other online retailers.

Books


Schedule

This schedule is tentative. Please come to class each Tuesday or Thursday prepared to discuss the readings listed for that date. All readings marked with an * are recommended, but not required.

Part I: Introduction to Experiments and Experimental Inference

Thursday, 08/29  No Class. See you at APSA!

Tuesday, 09/03  Experiments in the Discipline
- EPS. Chapter 2: 33-58
- Discussant sign up
- Complete CITI training and certification ([Access it Here](#))

Thursday, 09/05  Validity
- EPS Chapter 7: 253-276
- CHEPS Chapter 3: 27-40

Part II: Design and Analysis

Tuesday, 09/10  Power
- FEDAI Appendix 3.1: 93
Thursday, 09/12  Estimating Treatment Effects

- FEDAI. Chapters 2-3: 21-92


Tuesday, 09/17  Covariates

- FEDAI. Chapter 4: 95-130


Thursday, 09/19  Noncompliance

- FEDAI Chapters 5-6: 131-209


Tuesday, 09/24  Mechanisms

- FEDAI Chapter 10: 319-346


Part III: Types of Experiments

Thursday, 09/26  Lab Experiments I

- CHEPS Chapter 6-7: 73-101


- “CHEPS Chapter 4: 73-101

**Tuesday, 10/01  Lab Experiments II**


**Thursday, 10/03  Survey Experiments I**

- EPS 8.2.1-8.2.2: 278-295

- CHEPS Chapter 8: 102-114


**Tuesday, 10/08  Survey Experiments II**


**Thursday, 10/10  In Class Research Design Workshop**

- Present your research design ideas in class and we will workshop them!

**Tuesday, 10/15  No Class. Fall Break.**

**Thursday, 10/17  Conjoint Experiments I**


Tuesday, 10/22  Conjoint Experiments II

Thursday, 10/24  Field Experiments I
- CHEPS Chapter 9: 115-138
Tuesday, 10/29  Field Experiments II


Thursday, 10/31  Natural Experiments I

- FEDAI 1.6: 15-17


Tuesday, 11/05  Natural Experiments II

Part IV: Ethics and Transparency

Thursday, 11/07  Ethics I
- EPS Chapters 12-13: 455-521
- CHEPS Chapter 5: 58-69
- Humphreys, Macartan, Raul Sanchez de la Sierra, and Peter van der Winds. “Fishing, Commitment, and Communication: A Proposal for Comprehensive Nonbinding Research Registration.” Political Analysis. 2013. 21: 1-20
- *Nickerson, David. “When the Client Owns the Data.” The Experimental Political Scientist. 2011. 2(2): 5-6
Tuesday, 11/12  Ethics II


  
  – You might be interested in Chris Blattman’s response entitled “Is It OK for Researchers to Mess with Elections?” posted [here](#).

  – or Thomas Leeper’s response “In Defense of the Montana Experiment” found [here](#).


  – Resnick, Brian. “The Stanford Prison Experiment was Massively Influential. We Just Learned It Was A Fraud.” *Vox*. June 13, 2018. Find it [here](#).

Part V: Applications

Thursday, 11/14  Voting


**Tuesday, 11/19 Bargaining and Public Goods**


**Thursday, 11/21 Development**


Tuesday, 11/26  Intergroup Conflict


Thursday, 11/28  No Class. Thanksgiving Break.

- Come prepared to discuss whether stuffing is best prepared inside of the turkey or outside of the turkey. Alternatively, if you are vegetarian: where do you put the stuffing in a tofurkey?

Tuesday, 12/03  Final Presentations

- Present your final projects in class!

Thursday, 12/05  Final Presentations

- Present your final projects in class!