

Master of Science in Political Analytics

Experiments

[Meeting Times TBD]

2 credits

Core Course

Instructor:

Office Hours:

Response Policy:

Facilitator/Teaching Assistant, if applicable: TBD

Office Hours:

Response Policy:

Course Overview

Field experiments have become increasingly important ways of studying the effectiveness of political interventions, be they campaign tactics for mobilizing or persuading voters, fundraising tactics for political or charitable efforts, lobbying, recruiting volunteers, or influencing administrative or judicial outcomes through direct communication. In this course, we will discuss the logic of experimentation, its strengths and weaknesses compared to other methodologies, and the ways in which experimentation has been -- and could be -- used to investigate political phenomena. We will discuss a wide array of applications. Students will learn how to interpret and design experiments. In order to better understand the nuances of experimental design and analysis, we will roll up our sleeves and reanalyze some of the data from the weekly readings.

Prerequisites: Basic familiarity with introductory statistics is required. Familiarity with statistical software (e.g., R, Stata, SPSS) is helpful as well. Preparatory training in statistics and R will be provided in other Political Analytics courses that precede this one.

Learning Objectives

The aim of this course is to provide students with the following skills. Students will be able to

1. Frame a testable hypothesis having to do with a political intervention and its consequences.
2. Evaluate the strengths and weaknesses of alternative research designs that address this hypothesis. (e.g., Is the design likely to render unbiased results? Will the results be precise enough to be helpful to someone looking to make a decision? Is the research design costly or difficult to implement? Does the research design raise ethical concerns?)
3. Assess the extent to which a study, whether experimental or observational, satisfies core assumptions for unbiased inference about cause and effect.
4. Extract key information from an experimental write-up about the statistical findings and the degree of uncertainty that surrounds them.
5. Describe the mechanics of assembling an experimental dataset.
6. Analyze a dataset of experimental results in order to estimate the average effect of the intervention.
7. Describe experimental results in a concise manner that conveys the key statistical findings and their substantive implications.

Readings

Weekly readings may be found in the Canvas readings folder. The textbook for this course (indeed, the book was literally written for this course) is

- Green, Donald P. (2022). *Social Science Experiments: A Hands-on Introduction*. New York: Cambridge University Press.

The book offers a non-technical overview of experimental design and analysis. Examples are drawn from a variety of substantive domains, not just politics. The range of experimental designs (lab, survey, field) goes beyond what we will have time to cover in this class, which makes it a helpful resource as you move from this course to others in Political Analytics.

The book's online archive (with examples and R code for each chapter) is <https://osf.io/b78je>

This archive also includes a (free) *R Companion*, designed to guide a beginner through R code for experimental analysis and visualization.

Assignments and Assessments

1. Participation and Attendance are crucial for this course. Although a great deal of information may be gleaned from the readings, students generally find it difficult to grasp key concepts without formal instruction and accompanying discussion. Obviously, emergencies may call students away from regular participation, but the presumption is that students will attend every course session and participate actively. I welcome questions and comments at every point in our weekly meetings. You will note that I religiously ask for questions or comments at the start of every class, so do bring up anything that is on your mind as you do the readings or reflect on applications in your own line of work. Indeed, I welcome you to raise challenging questions about the value of the experimental enterprise or the value of the readings (including my work). Debate can be a stimulating and informative way to engage with issues of substance or method.

2. Critical Evaluation of Reading Assignments

Throughout the course, students will conduct critical evaluations of selected reading assignments through Hypothesis, a social annotation tool. Digital annotation tools allow you to "mark the margins" of a reading, much as you would if you were putting post-it notes in a textbook or highlighting a PDF. With social annotation, you will be able to see each other's annotations and build on them as you move through the readings. Obviously, the risk of social annotation is that readers will create a cacophony of unhelpful or trivial annotations. Therefore, operate on the following principle: only express key ideas or questions such that others will benefit from your annotations. As a basic rule of thumb, expect to offer five annotations per reading. If you see a page that has yet to attract a comment, take this as an opportunity to share a thought or a question. Feel free to reply to other students' annotations, but do so in a respectful and constructive manner.

3. Weekly Homework

In order to deepen your understanding of the reading and your appreciation for the fine points of experimental design, we will analyze the data from one reading each week. Our statistical analysis will be simple and straightforward. Our goal is to describe the key ingredients of a given experiment: the number of observations assigned to treatment and control, the distribution of outcomes in treatment and control, the apparent average treatment effect, and the statistical uncertainty surrounding this estimate. Where possible, we will use both statistical methods and graphical methods to understand and convey the key results. Our aim will be to generate meaningful numbers and to interpret them substantively.

4. Final Exam

The purpose of the final exam is to consolidate students' understanding of the course material. To this end, the final exam will ask students to (1) define and explain the importance of key terms, (2) interpret the results of experimental research findings from the readings, and (3) offer design suggestions for studying causal questions about the effectiveness of political interventions.

Grading

The final grade will be calculated as described below:

FINAL GRADING SCALE

Grade	Percentage
A+	98–100 %
A	93–97.9 %
A-	90–92.9 %
B+	87–89.9 %
B	83–86.9 %
B-	80–82.9 %
C+	77–79.9 %
C	73–76.9 %
C-	70–72.9 %
D	60–69.9 %
F	59.9% and below

Assignment/Assessment	% Weight	Individual or Group/Team Grade
Participation and Attendance	15	Individual
Critical Evaluation of Reading Assignments	25	Individual
Weekly Homework	30	Individual
Final Exam	30	Individual

Course Schedule/Course Calendar

Module/Week			
Module/Week & Topic with specific dates	Topic	Readings	Activities/Assignments for this module
Module 1	What is an experiment and why conduct one?	Green (2022), Chapter 1 Green, Donald P., and José S. Gomez. "Psychological Theories Meet the	Complete readings.

		<p>Challenge of Persuading and Mobilising Voters." <i>The Cambridge Handbook of Political Psychology</i> (2022): 476.</p>	<p>Participate in the "Getting to Know You Discussion" forum.</p> <p>Attend the class session.</p>
Module 2	Core concepts	Green (2022), Chapter 2	<p>Complete readings and offer annotations.</p> <p>Attend the class session prepared to ask questions or offer comments.</p> <p>Complete the weekly homework assignment.</p>
Module 3	Varieties of elections-related experiments 1: Voter turnout and voter registration	<p>GOTV:</p> <ul style="list-style-type: none"> Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. "An experiment testing the relative effectiveness of encouraging voter participation by inducing feelings of pride or shame." <i>Political Behavior</i> 32 (2010): 409-422. <p>Registration</p> <ul style="list-style-type: none"> Nickerson, David W. "Do voter registration drives increase participation? For whom and when?" <i>Journal of Politics</i> 77, no. 1 (2015): 88-101. 	<p>Complete readings and offer annotations.</p> <p>Attend the class session prepared to ask questions or offer comments.</p> <p>Complete the weekly homework assignment.</p>
Module 4	Varieties of elections-related experiments 2: Persuasion	<p>Vote choice</p> <ul style="list-style-type: none"> Rogers, Todd, and Joel Middleton. "Are ballot initiative outcomes influenced by the campaigns of independent groups? A precinct-randomized field experiment showing that they are." <i>Political Behavior</i> 37 (2015): 567-593. <p>Issue stances</p> <ul style="list-style-type: none"> Kalla, Joshua L., and David E. Broockman. "Outside lobbying" over the airwaves: A randomized field experiment on televised issue ads." <i>American Political</i> 	<p>Complete readings and offer annotations.</p> <p>Attend the class session prepared to ask questions or offer comments.</p> <p>Complete the weekly homework assignment.</p>

		<p><i>Science Review</i> 116, no. 3 (2022): 1126-1132.</p> <p>Outreach by public officials</p> <ul style="list-style-type: none"> Butler, Daniel M., and Hans JG Hassell. "On the limits of officials' ability to change citizens' priorities: A field experiment in local politics." <i>American Political Science Review</i> 112, no. 4 (2018): 860-873. 	
Module 5	Varieties of elections-related experiments 3: Survey and Hybrid Experiments	<p>Advertising testing during a survey</p> <ul style="list-style-type: none"> Coppock, Alexander, Seth J. Hill, and Lynn Vavreck. "The small effects of political advertising are small regardless of context, message, sender, or receiver: Evidence from 59 real-time randomized experiments." <i>Science advances</i> 6, no. 36 (2020): eabc4046. <p>Digital media tests using encouragement designs</p> <ul style="list-style-type: none"> Guess, Andrew M., Pablo Barberá, Simon Munzert, and JungHwan Yang. "The consequences of online partisan media." <i>Proceedings of the National Academy of Sciences</i> 118, no. 14 (2021): e2013464118. 	<p>Complete readings and offer annotations.</p> <p>Attend the class session prepared to ask questions or offer comments.</p> <p>Complete the weekly homework assignment.</p>
Module 6	Varieties of institutions-related political experiments	<p>Lobbying</p> <ul style="list-style-type: none"> Bergan, Daniel E., and Richard T. Cole. "Call Your Legislator: a field experimental study of the impact of a constituency mobilization campaign on legislative voting." <i>Political Behavior</i> 37 (2015): 27-42. <p>Legislative access</p> <ul style="list-style-type: none"> Kalla, Joshua L., and David E. Broockman. "Campaign contributions facilitate access to congressional officials: A randomized field experiment." <i>American</i> 	<p>Complete readings and offer annotations.</p> <p>Attend the class session prepared to ask questions or offer comments.</p> <p>Complete the weekly homework assignment.</p>

		<p><i>Journal of Political Science</i> 60, no. 3 (2016): 545-558.</p> <p>(Optional) Policy information and roll call votes</p> <ul style="list-style-type: none"> Zelizer, Adam. "How responsive are legislators to policy information? Evidence from a field experiment in a state legislature." <i>Legislative Studies Quarterly</i> 43, no. 4 (2018): 595-618. <p>(Optional) Judicial Recusal</p> <ul style="list-style-type: none"> Krasno, Jonathan S., Donald P. Green, Costas Panagopoulos, Dane Thorley, and Michael Schwam-Baird. "Campaign Donations, Judicial Recusal, and Disclosure: A Field Experiment." <i>The Journal of Politics</i> 83, no. 4 (2021): 1844-1850. 	
Reading Week	Optional review session to prepare for the final exam		
Module 7	Final exam	In-class final exam	

Course Policies

Participation and Attendance

You are expected to complete all assigned readings, attend all class sessions. If you need to miss a class for any reason, please discuss the absence with me in advance.

Late work

No credit will be granted to any written assignment that is not submitted on the due date noted in the course syllabus without advance notice and permission from the instructor.

Citation & Submission

You must always cite your sources, preferably referring to specific page numbers. Avoid citing on-line works or web pages unless they have a permanent identifier.

Submit your work via Open Science Framework (not via email). To create a free account, go to osf.io.

School and University Policies and Resources

Copyright Policy

Please note—Due to copyright restrictions, online access to this material is limited to instructors and students currently registered for this course. Please be advised that by clicking the link to the electronic materials in this course, you have read and accept the following:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

Academic Integrity

Columbia University expects its students to act with honesty and propriety at all times and to respect the rights of others. It is fundamental University policy that academic dishonesty in any guise is unacceptable. It is essential to the academic integrity and vitality of this community that individuals do their own work and properly acknowledge the circumstances, ideas, sources, and assistance upon which that work is based. Academic honesty in class assignments and exams is expected of all students at all times.

SPS holds each member of its community responsible for understanding and abiding by the SPS Academic Integrity and Community Standards posted at <https://sps.columbia.edu/students/student-support/academic-integrity-community-standards>. You are required to read these standards within the first few days of class. Ignorance of the School's policy concerning academic dishonesty shall not be a defense in any disciplinary proceedings.

Diversity Statement

It is our intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture.

Accessibility

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website: <https://health.columbia.edu/services/ods/support>.

Class Recordings

All or portions of the class may be recorded at the discretion of the Instructor to support your learning. At any point, the Instructor has the right to discontinue the recording if it is deemed obstructive to the learning process.

If the recording is posted, it is confidential and not to be shared outside of the class.

SPS Academic Resources

The Office of Student Affairs provides students with academic counseling and support services such as online tutoring and career coaching: <https://sps.columbia.edu/students/student-support/student-support-resources>.

Columbia University Information Technology

[Columbia University Information Technology](#) (CUIT) provides Columbia University students, faculty and staff with central computing and communications services. Students, faculty and staff may access [University-provided and discounted software downloads](#).

Columbia University Library

[Columbia's extensive library system](#) ranks in the top five academic libraries in the nation, with many of its services and resources available online.

The Writing Center

The Writing Center provides writing support to undergraduate and graduate students through one-on-one consultations and workshops. They provide support at every stage of your writing, from brainstorming to final drafts. If you would like writing support, please visit the following site to learn about services offered and steps for scheduling an appointment. This resource is open to Columbia graduate students at no additional charge. Visit <http://www.college.columbia.edu/core/uwp/writing-center>.

Netiquette

Online sessions in this course will be offered through Zoom, accessible through Canvas. A reliable Internet connection and functioning webcam and microphone are required. It is your responsibility to resolve any known technical issues prior to class. Your webcam should remain turned on for the duration of each class, and you should expect to be present the entire time. Avoid distractions and maintain professional etiquette.

Please note: Instructors may use Canvas or Zoom analytics in evaluating your online participation.

More guidance can be found at https://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm

Netiquette is a way of defining professionalism for collaborations and communication that take place in online environments. Here are some Student Guidelines for this class:

- Avoid using offensive language or language that is not appropriate for a professional setting.
- Do not mock another student's abilities or skills, although you are free to mock the instructor.
- Communicate in a way that is clear and easy for others to understand.
- Balance collegiality with academic honesty.
- Keep an open mind and be willing to express your opinion.
- Reflect on your statements and how they might affect others.
- Do not hesitate to ask for feedback.
- When in doubt, check with your instructor for clarification.