

School of Public and International Affairs Department of Political Science Spring 2025

POLS 8500: Experimental Methods in Political Science

Wednesdays, 3pm – 5:45 pm in Baldwin Hall 302 Instructor: Professor Alexa Bankert

Contact: <u>alexa.bankert@uga.edu</u>

Course Description and Objective

This course has three primary objectives.

First, it introduces experimental methods in political science and other fields, exploring both their potential and their limitations. We will examine how well-designed and well-implemented experiments can establish causal relationships, emphasizing that strong experimental design is rooted in a solid theoretical framework. This foundation guides every phase of the experiment, from conception and design to implementation and data analysis.

Second, the course will teach you when experiments are appropriate and when they are not. While experiments offer valuable insights into causality, not every research question in political science can—or should—be addressed through experimental methods. Understanding when to use experiments is just as crucial as knowing how to conduct them.

Finally, this course takes a hands-on approach, with a focus on actively implementing the stages of an experimental research project. This will include addressing ethical considerations in research with human subjects, challenges related to external validity, corroboration, reproducibility, and engaging with the ongoing debate surrounding pre-registration.

Course Materials

There are no required (hard copy) books for this course. All readings can be found online or at the library. Generally, there will be two types of readings: (1) introductions to the fundamental concepts of experimental research and (2) their applications to specific research questions in peer-reviewed studies.

How To Reach Me

Our course is administered through eLC. You will find all of our course materials through this website. You will also submit assignments on eLC.

My primary means of communication with the class will be through announcements posted in eLC. Make sure you receive eLC updates for our class automatically via email (eLC > Click on your profile > Notifications > Instant Notifications).

If you have any questions, please do not hesitate to contact me at alexa.bankert@uga.edu but please give me at least 24 hours to reply to your email.

Please note that you cannot reply to an email I send out via eLC (ending in @uga.view.usg.edu emails) and that – due to privacy and confidentiality concern – I can only reply to emails sent from your UGA account.

Student Drop-In Hour

I am here to help, so if you need support or if you have difficulty with the course materials and/or assignments, please reach out. You can also drop by my office on Wednesdays, 2pm - 3pm. If that timeframe does not work for you or if there is an urgent matter, please email me and we can find another time to meet.

Evaluation

- 1) Class Attendance and Participation 15%
- 2) Weekly Discussion Questions: 10%
- 3) Discussion Lead: 15%
- 4) Homework Assignments: 20%
- 5) Research Proposal (+ Presentation): 20%
- 6) Experimental Design and Pre-Analysis Plan (+ Presentation): 20%

Grading Scale for Final Semester Grades

100-94 A	79-77 C+	***Please note that there is no standard rounding policy. Rounding decisions can be made on a case-by-case basis***
93-90 A-	76-74 C	
89-87 B+	73-70 C-	
86-84 B	69-60 D	
83-80 B-	59-00 F	

Class Attendance and Participation

Your attendance and participation in class discussions is vital to our success this semester. I will take attendance at each class meeting. You must let me know in advance and provide documentation excusing your absence to avoid a grade penalty. You should come to class having read the assigned work closely enough to actively participate in a detailed and critical discussion of the arguments and evidence presented by the authors.

Weekly Discussion Questions

You will submit three discussion questions each week. We will use these to help guide our discussion. Open-ended questions relating to how the articles and books speak to one another, critique the logic of arguments, or challenge the design of the experiment are preferred. **Due by 5pm the day before class. Please submit via eLC.**

Discussion Lead

You will lead the class discussion once during the semester. You will be responsible for summarizing the articles, selecting discussion questions from among those submitted by your colleagues, generating several of your own, and moderating our review and critique of each of the readings. Please also create a handout for the class. This will be useful for your comprehensive exams. You will sign up for a discussion slot on the first day of class. You can choose any topic from Week 5 to Week 12.

Homework Assignments

There will be four homework assignments this semester that are due by 5pm the day before each class via eLC. For more details, please see the course schedule.

Research Proposal (+ Presentation)

You will produce a 3,500-word document outlining the research question that you wish to answer with the findings from your experiment. This document should briefly state the research question and summarize past work on the question, especially that work which employs experiments. You should devote about 1,500 words to three ideas for experiments that might be used to make progress on your research question. The main purpose of this assignment is to get you thinking about your research topic and potential experimental designs. Your final research design ideally addresses this research question or employs one of the experiment ideas that you put forth. **Due by 5pm the day before class.** You will present your research question and outline your potential experiments on March 19.

Experimental Design and Pre-Analysis Plan

You will design an experiment that addresses a research question of your choosing. You will lay out your research design in a 8,000-word document that includes a statement of the research question, a short summary of existing work on the topic, a list of hypotheses that the experiment allows you to test, sample selection criteria, clear description of and motivation for each of the manipulations, randomization scheme, and a plan for analyzing the resulting data (models you plan to estimate, covariates, sub-samples, etc.). The design and analysis plan are due by 5pm the day before our final class. You will present your research question and outline your potential experiments on the last day of class.

Important Course Dates and Deadlines

First Day of Class: Monday, January 6 Drop/Add: January 6 – January 10

Homework Assignment #1: Tuesday, January 21 Homework Assignment #2: Tuesday, February 4 Homework Assignment #3: Tuesday, February 11

Research Proposal: Tuesday, March 18

Research Proposal Presentation: Wednesday, March 19

Spring Break: March 3 – March 7

Withdrawal Deadline: Thursday, April 3 Homework Assignment #4: Tuesday, April 8 Last Day of Our Class: Wednesday, April 23

Final Design and Pre-Analysis Plan: Tuesday, April 22

Final Presentation: Wednesday, April 23

Course Schedule

Week 1, Jan.8 - Introduction to the Class

Week 2, Jan. 15 - A Brief History of Experiments in Political Science

J. Druckman. Experimental Thinking – A Primer on Social Science Experiments. *Cambridge University Press.* 2022. Chapters 1-2.

Druckman, James N., Donald P. Green, James H. Kuklinksi, and Arthur Lupia. 2006. The Growth and Development of Experimental Research in Political Science. *American Political Science Review* 100(4): 627-635.

McDermott, Rose. 2002. Experimental Methods in Political Science. *Annual Review of Political Science* 5: 31-61.

Gerber, A. S. and Green, D. P. (2012). Field experiments: Design, analysis, and interpretation. W.W. Norton & Company Norton, New York, NY. Chapter 1.

Druckman, J. N., & Green, D. P. (2021). A new era of experimental political science. Advances in experimental political science, 1-15.

Week 3, Jan. 22 – Fundamentals of Experimental Designs

Homework 1: Set up a Qualtrics account and program a simple experiment that would test the following hypothesis: "Exposure to violent content intensifies party attachments." Share the survey with me and write a brief paragraph justifying your design choices.

J. Druckman. Experimental Thinking – A Primer on Social Science Experiments. *Cambridge University Press.* 2022. Chapters 5-6

Imai, K., Keele, L., Tingley, D., and Yamamoto, T. (2011). Unpacking the black box of causality: Learning about causal mechanisms from experimental and observational studies. American Political Science Review, 105(4):765–789.

Bullock, J. G., Green, D. P., and Ha, S. E. (2010). Yes, but what's the mechanism?(don't expect an easy answer). Journal of personality and social psychology, 98(4):550.

Kam, C. D. and Trussler, M. J. (2017). At the nexus of observational and experimental research: Theory, specification, and analysis of experiments with heterogeneous treatment effects. Political Behavior, 39(4):789–815.

Week 4, Jan.29 – Validity and Samples in Experimental Political Science

McDermott, R. (2011). Internal and external validity. In Druckman, J. N., Green, D. P., Kuklinski, J. H., and Lupia, A., editors, Handbook of Experimental Political Science, pages 27–41. Cambridge University Press, New York, NY.

J. Druckman. Experimental Thinking – A Primer on Social Science Experiments. *Cambridge University Press.* 2022. Chapters 3-4.

Henrich, Joseph, Steven J. Heine, and Ara Norenzayan. 2010. The Weirdest People in the World? *Behavioral and Brain Sciences 33* (April): 61-83. Skim.

Druckman, James N., and Cindy D. Kam. 2011. Students as Experimental Participants: A Defense of the "Narrow Data Base." In J.N. Druckman, D.P. Green, J.H. Kuklinski, and A. Lupia, eds., *Cambridge Handbook of Experimental Political Science*. New York: Cambridge University Press.

Krupnikov Y, Nam HH, Style H. Convenience Samples in Political Science Experiments. In: Druckman JN, Green DP, eds. *Advances in Experimental Political Science*. Cambridge University Press; 2021:165-183.

Week 5, Feb. 5 – Types of Experiments: Survey Experiments

Homework 2: Examine Druckman and Leeper (2012). In a short memo, address the following questions:

- a. What is the theory? What is the hypothesis?
- b. Why is an experiment suitable for this hypothesis? Could this have been studied with observational data?
- c. What is the treatment? What is the outcome measure?
- d. What makes this a "good" experiment?
- e. Which parts of the experiment are reported?
- f. What statistical methods are used to analyze the data?
- g. What methods are used to illustrate the results?
- h. Are there any robustness checks or supplementary analyses?

Barabas, J. and Jerit, J. (2010). Are survey experiments externally valid? American Political Science Review, 104(2):226–242

Gerber, Alan S, and Donald P Green. Field Experiments: Design, Analysis, and Interpretation. WW Norton, 2012. Chapter 3.

Gaines, Brian J., James H. Kukilinski, and Paul J. Quirk. 2007. The Logic of the Survey Experiment Revisited. *Political Analysis* 15(1): 1-20.

Mutz, Diana. 2021. "Improving Experimental Treatments in Political Science." In James N. Druckman, and Donald P. Green, eds. Cambridge Handbook of Advances in Experimental Political Science. New York: Cambridge University Press.

Application:

Druckman, James N., and Thomas J. Leeper. 2012. Learning More from Political Communication Experiments: Pretreatment and Its Effects. *American Journal of Political Science* 56: 875-896.

Week 6, Feb. 12 – Types of Experiments: Survey Experiments II

Homework 3: You will be assigned to one of two groups. Group A will program a list experiment in Qualtrics. Group B will program a conjoint experiment in Qualtrics. Both groups will present their finished product in class.

Blair, G. and Imai, K. (2012). Statistical analysis of list experiments. *Political Analysis*, 20(1):47–77.

Glynn, A. N. (2013). What can we learn with statistical truth serum? Design and analysis of the list experiment. *Public Opinion Quarterly*, 77(S1):159–172.

Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2013). Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis*, 22(1):1–30.

Bansak, K., Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2021). Beyond the breaking point? Survey satisficing in conjoint experiments. *Political Science Research and Methods*, 9(1), 53-71.

Applications:

Blair, G., Imai, K., and Lyall, J. (2014). Comparing and combining list and endorsement experiments: Evidence from Afghanistan. *American Journal of Political Science*, 58(4):1043–1063.

Hainmueller, J. and Hopkins, D. J. (2015). The hidden American immigration consensus: A conjoint analysis of attitudes toward immigrants. *American Journal of Political Science*, 59(3):529–548.

Week 7, Feb. 19 - Types of Experiments: Lab Experiments

Iyengar, Shanto. Laboratory Experiments In Political Science. Cambridge Handbook Of Experimental Political Science.

Hovland, Carl I. 1959. Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change. *The American Psychologist* 14: 8-17.

Eckel, Catherine, and Natalia Londono. 2021. "How to Tame Lab-in-the-Field-Experiments" In James N. Druckman, and Donald P. Green, eds. *Cambridge Handbook of Advances in Experimental Political Science*. New York: Cambridge University Press.

Jamison, J., Karlan, D., & Schechter, L. (2008). To deceive or not to deceive: The effect of deception on behavior in future laboratory experiments. *Journal of Economic Behavior & Organization*, 68(3-4), 477-488.

Applications:

Klar, Samara. 2014. Partisanship in a Social Setting. *American Journal of Political Science* 58: 687-704.

Renshon, J., Lee, J. J., and Tingley, D. (2015). Physiological arousal and political beliefs. Political Psychology, 36(5):569–585

Week 8, Feb. 26 – Types of Experiments: Field Experiments

Gerber, Alan S., and Donald P. Green. 2012. Field Experiments: Design, Analysis, and Interpretation. 1st ed. New York: W. W. Norton. Chapters 1, 12.

Broockman, David E., Joshua L. Kalla, and Jasjeet S. Sekhon. 2017. The Design of Field Experiments with Survey Outcomes: A Framework for Selecting More Efficient, Robust, and Ethical Designs. *Political Analysis* 25: 435-464.

Coppock, A. and Green, D. P. (2015). 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):113–131.

Grose, C. R. (2014). Field experimental work on political institutions. *Annual Review of Political Science*, 17:355–370.

Levine, Adam Seth. 2021. How to Form Organizational Partnerships to Run Experiments. In James N. Druckman, and Donald P. Green, eds. *Cambridge Handbook of Advances in Experimental Political Science*. New York: Cambridge University Press.

Applications:

Butler, Daniel M., and David E. Broockman. 2011. Do Politicians Racially Discriminate Against Constituents? A Field Experiment on State Legislators. *American Journal of Political Science* 55: 463-477.

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

Week 9, March 12 - Natural Experiments

Sekhon, Jasjeet S., and Roćio Titiunik. 2012. When Natural Experiments Are Neither Natural Nor Experiments. *American Political Science Review* 106: 35-57.

Titiunik, Rocio. 2021. "Natural Experiments." In James N. Druckman, and Donald P. Green, eds. *Cambridge Handbook of Advances in Experimental Political Science*. New York: Cambridge University Press.

Dunning, Thad. 2012. Natural Experiments in the Social Sciences: A Design-Based Approach. Strategies for Social Inquiry. New York: Cambridge University Press. Chapters 1-3, 8, 11.

Applications:

Doherty, David, Alan S. Gerber, and Donald P. Green. 2006. Personal Income and Attitudes toward Redistribution: A Study of Lottery Winners. *Political Psychology* 27: 441–458.

Erikson, Robert S., and Laura Stoker. 2011. Caught in the Draft: The Effects of Vietnam Draft Lottery Status on Political Attitudes. *American Political Science Review* 105: 221-237.

Week 10, March 19 - Proposal Presentations

Week 11, March 26 - Design Considerations & Questionnaires

Mullinix, Kevin J., Thomas J. Leeper, James N. Druckman, and Jeremy Freese. 2015. "The Generalizability of Survey Experiments. *Journal of Experimental Political Science* 2: 109-138.

Seawright J. What Can Multi-Method Research Add to Experiments? In: Druckman JN, Green DP, eds. Advances in Experimental Political Science. Cambridge University Press; 2021:369-384.

Mummolo, Jonathan, and Erik Peterson. 2019. Demand Effects in Survey Experiments: An Empirical Assessment. *American Political Science Review* 113: 517-529.

Clifford, Scott, Geoffrey Sheagley, and Spencer Piston. 2021. Increasing Precision without Altering Treatment Effects: Repeated Measures Designs in Survey Experiments. *American Political Science Review* 115: 1048-1065.

Kane, John V., and Jason Barabas. 2019. No Harm in Checking: Using Factual Manipulation Checks to Assess Attentiveness in Experiments. American Journal of Political Science 53: 234-249.

Krosnick, Jon A., and Stanley Presser. 2010. Question and Questionnaire Design. In Peter V. Marsden, and James D. Wright. Handbook of Survey Research. Bingley: Emerald.

Week 12, April 2 - Mediation, Moderation, and Spillover Effects

Baron, Reuben M., and David A. Kenny. 1986. The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology* 51: 1173-1182.

Pirlott, Angela G., and David P. MacKinnon. 2016. Design Approaches to Experimental Mediation. *Journal of Experimental Social Psychology* 66: 29-38.

Coppock, Alexander, Thomas J. Leeper, and Kevin J. Mullinix. 2018. "The Generalizability of Heterogeneous Treatment Effect Estimates Across Samples" *Proceedings of the National Academy of Science* 115: 12441-12446.

Glynn, Adam. 2021. "Advances in Mediation." In James N. Druckman, and Donald P. Green, eds. Cambridge Handbook of Advances in Experimental Political Science. New York: *Cambridge University Press*.

Sinclair, Betsy, Margaret McConnell, and Donald P. Green. 2012. Detecting Spillover Effects: Design and Analysis of Multilevel Experiments. *American Journal of Political Science* 56: 1055-1069.

Applications:

Coppock, Alexander. 2014. "Information Spillovers: Another Look at Experimental Estimates of Legislator Responsiveness." Journal of Experimental Political Science 1: 159-169. AND Coppock, Alexander. 2016. "Information Spillovers: Another Look at

Experimental Estimates of Legislator Responsiveness – Corrigendum." Journal of Experimental Political Science 3: 206-208.

Week 13, April 9 – Research Ethics and IRB

Homework 4: Complete the IRB CITI course and submit a copy of the final certification page via eLC. Go to https://research.uga.edu/hrpp/citi-training/.

Hertwig, R. and Ortmann, A. (2008). Deception in experiments: Revisiting the arguments in its defense. *Ethics & Behavior*, 18(1):59–92.

Gerber, Alan S, and Donald P Green. Field Experiments: Design, Analysis, and Interpretation. WW Norton, 2012, Chapter 2 and Appendix A.

Costa, M., Crabtree, C., Holbein, J. B., & Landgrave, M. (2023). Is that ethical? An exploration of political scientists' views on research ethics. *Research & Politics*, 10(4), 20531680231209553.

Teele, Dawn. 2021. "Virtual Consent: The Bronze Standard for Experimental Ethics." In James N. Druckman, and Donald P. Green, eds. Cambridge Handbook of Advances in Experimental Political Science. *New York: Cambridge University Press*.

Read the American Political Science Association's human subjects guidelines: https://politicalsciencenow.com/submit-your-comments-to-the-ad-hoc-committee-on-the-protection-of-human-subjects-report/

Applications:

Milgram, S. (1963). Behavioral study of obedience. *The Journal of abnormal and social psychology*, 67(4):371.

Zimbardo, Phillip. A Pirandellian Prison. New York Times Magazine April 8, 1973.

Week 14, April 16 - Pre-Registration and Replications

Ioannidis, J. P. (2005). Why most published research findings are false. *PLoS medicine*, 2(8):e124.

Olken, B. A. (2015). Promises and perils of pre-analysis plans. *The Journal of Economic Perspectives*, 29(3):61–80.

Simmons, J. P., Nelson, L. D., and Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological science*, 22(11):1359–1366.

Gerber, Alan S., Kevin Arceneaux, Cheryl Boudreau, Conor M. Dowling, and D. Sunshine Hillygus. 2015. "Reporting Balance Tables, Response Rates and Manipulation Checks in Experimental Research: A Reply from the Committee That Prepared the Reporting Guidelines." *Journal of Experimental Political Science* 2 (2):216–229.

Lupia, Arthur, and Colin Elman. 2014. Openness in Political Science: Data Access and Research Transparency. *PS: Political Science and Politics* 47(1): 19-42.

Nosek, Brian A., et al. 2015. Promoting an Open Research Culture. *Science* 348: 1422-1425.

Baker, Monya. 2016. Is There a Reproducibility Crisis? *Nature* 533 (May):452–54.

Week 15, April 23 – Final Presentations

Other Policies and Resources

Use of Generative AI Technology for Coursework

The use of Generative AI (GAI) tools is **not** permitted in this course. I do conduct AI checks on <u>every</u> paper and assignment to determine whether an assignment was created using generative AI. If I believe a violation of A Culture of Honesty may have occurred, I have a responsibility to report to the Office of Academic Honesty. If I do, you will be informed of my report, so you can look out for an email from the Office of Academic Honesty who will schedule a facilitated discussion between you and I to review your case. The goal will be an agreement reached about what occurred, and if it involved dishonesty, an appropriate sanction. To protect your rights, I cannot discuss your case outside of that facilitated meeting. Finally, GAI is highly vulnerable to inaccuracy and bias. You should assume GAI output is wrong unless you either know the answer or can verify it with another source.

Grade Appeals

You may appeal the grade to me <u>within two weeks</u> of receiving your grade. Keep in mind that formal grade appeals must be made in writing, and in the case of a paper, I will regrade your entire paper. Therefore, your grade can go up or down.

Incompletes

A final grade of "Incomplete" will only be given in this course under exceptional

circumstances and is solely at the discretion of the instructor. If an incomplete is given, it is your responsibility to complete the necessary requirements as early in the following semester as possible.

Late Submissions

Late paper submissions will be docked 10% per day, for each day that a paper is late (including weekends). Weekly discussion questions and homework assignments <u>cannot</u> be submitted late for credit unless you arranged an extension with me in advance. Generally, I cannot extend deadlines after the deadline has passed.

Syllabus Policy:

I reserve the right to make changes to the syllabus if necessary. I will give you fair notice (at least a week) if something, such as a reading assignment, is to change.

Disability Resource Center

If you anticipate needing accommodations due to the impact of a disability or medical condition, you must register for services with the Disability Resource Center. Additional information can be found here: http://drc.uga.edu/

Culture of Honesty Policy

You are responsible for knowing and complying with the policy and procedures relating to academic honesty. To understand what constitutes dishonest work, as defined by the University, please carefully review the policy here: https://honesty.uga.edu/ resources/documents/academic honesty policy 2017.pdf

Preferred Name

Class rosters are provided to the instructor with the student's legal name. I am eager to address you by your preferred name. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

Mental Health and Wellness Resources. If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources for a student seeking mental health services (https://www.uhs.uga.edu/bewelluga/bewelluga) or crisis support (https://www.uhs.uga.edu/info/emergencies).

If you need help managing stress, anxiety, relationships, etc., please visit BeWellUGA (https://www.uhs.uga.edu/bewelluga/bewelluga) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.