

Advanced Research Design Political Science 9502A - Fall 2022  
University of Western Ontario  
Professor Matthew Lebo

**Class Information:**

Tuesday 1:00pm-3:00pm  
SSC 7236

**Instructor:** Dr. Matthew Lebo Email: [matthew.lebo@uwo.ca](mailto:matthew.lebo@uwo.ca)

Office: SSC 7239

Office Hours: Wednesday 10-12 or by appointment

**Course Description:**

This course aims to teach PhD students about the fundamentals of doing research in political science. We will focus on the interplay of theory, hypotheses, empirical strategies, and data. We will cover some examples of published research and learn the basic building blocks to conduct similar work. We will learn a bit about data and use the statistical software package Stata to put into practice some of the basics.

**Learning Objectives:**

- Understand how the scientific method is used in the social sciences.
- Understand the building blocks of social science research such as research questions, levels of analysis, theories, data generating processes, hypotheses, and hypothesis testing with data.
- Be able to construct a research design and think it through from research question to statistical inference.
- Know how to connect theoretical explanations of data generating processes to model designs that allow scientific inferences.
- Learn about the evolution of scientific research in the field of political science.
- Learn some basic statistics and know how they can be used to test hypotheses with political data.
- Learn about the profession of political science and how to navigate graduate school and beyond.

**Covid:**

We will follow Western's policies regarding Covid and try to be as safe as possible in conducting classes. This includes:

- Masks in class. Masks can be removed when speaking.
- Booster shots are required beyond the two-shot vaccination.
- Do not come to class or even campus if you are feeling unwell or have been exposed to someone with Covid.

**Course Requirements:**

Class Participation (20%) – Graduate seminars require a lot of discussion. Everyone should be doing all the readings before class and come prepared to discuss them. **Everyone should submit two discussion questions each week to the OWL forum before class.** Giving and receiving constructive criticism are also key skills to develop in graduate school. Ask questions – about the material, each other's

questions, and the profession. I will spend some time each class lecturing but my main role is to moderate and steer the discussion.

You should also be taking part in the life of the department. There will be talks and presentations and you should aim for perfect attendance. In particular, a job talk is a presentation by someone interviewing for an academic job – if that’s where you want to be in a few years, learning about the scope of a dissertation project and seeing the end result of a major research project will be really useful to you.

Four short papers (10% each).

1. Find, summarize, assign, discuss, and write a 2-page summary of a favorite piece of research for the class. These will be spread out over the last few weeks of classes.

2, 3, and 4. Short papers discussing a reading or topic of the week. To be discussed further in class.

Final research design paper (40%). Specifics will be discussed in class. You will choose a unique research question, find and cover the relevant literature, develop a theory and falsifiable hypotheses, collect some data or describe carefully how you would do so, and then outline how you will test your hypotheses. This should be the start of a paper you continue to work on after this class ends. You could pursue it as a publication or as a piece of your dissertation.

Outline – 5% – Due November 8

Draft Paper – Due November 29

Peer critique – 5% – Due December 6

Final submission – 30% – Due December 12

### **Course Materials:**

Required Books:

- Kellstedt, Paul M., and Guy D. Whitten. 2018. *The Fundamentals of Political Science Research*. Third Edition. New York, NY: Cambridge University Press.
- Gary King, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry*. Princeton: Princeton University Press.
- Huntington-Klein, Nick. 2021. *The Effect: An Introduction to Research Design and Causality*. (Available here: <https://theeffectbook.net>)

Other readings will be available electronically on OWL or through one of the library’s databases. A search for the journal title on the main library site will usually turn up the electronic site.

Here are week by week lists of our topics and readings. There might be some tweaking of these from week to week.

**Class 1: September 13 – Overview, Syllabus, and Studying Political Science Scientifically**

Popper, Karl. 1963. "Science as Falsification.": <https://staff.washington.edu/lynnhank/Popper-1.pdf>

Naughton, John. 2012. "Thomas Kuhn: The Man Who Changed the Way the World Looked at Science." The Guardian, August 18.: <https://www.theguardian.com/science/2012/aug/19/thomas-kuhn-structure-scientific-revolutions>

Kellstedt and Whitten, Chapters 1 & 2.

**Class 2: September 20 – The Basics of Research Design – Research Questions**

KKV, Designing Social Inquiry, Chapters 1 & 2

Huntington-Klein, The Effect, Intro and Chapters 1 & 2.

Kellstedt and Whitten, The Fundamentals of Political Science Research, Chapters 1 & 2

Gill, Jeff. 2021. "Political Science is Data Science: <file:///Users/matthewlebo/Downloads/gill2021.pdf>

Raff, Jennifer. 2016. "How to read and understand a scientific paper": <https://blogs.lse.ac.uk/impactofsocialsciences/2016/05/09/how-to-read-and-understand-a-scientific-paper-a-guide-for-non-scientists/>

**Class 3: September 27 – Causality & Causal Inference, Part I**

KKV, Designing Social Inquiry, Chapter 3.

Huntington-Klein, The Effect, Intro and Chapters 3 & 4.

Gerring, John. 2012. "Mere Description." British Journal of Political Science 42: 721-46.

Kellstedt and Whitten, The Fundamentals of Political Science Research, Chapter 3.

William H. Riker, 1982, "The Two-Party System and Duverger's Law: An Essay on the History of Political Science," American Political Science Review 76(4): 753-766.

**Class 4: October 4 – Causality and Causal Inference, Part II**

Kellstedt and Whitten, The Fundamentals of Political Science Research, Chapter 4

KKV, Designing Social Inquiry, Chapter 4.

Geddes, Barbara. 1990. "How the Cases You Choose Affect the Answers You Get." *Political Analysis* 2: 131-52.

Huntington-Klein, *The Effect*, Intro and Chapters 5-7.

James Mahoney and Gary Goertz, 2006, "A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research," *Political Analysis* 14: 227-249.

### **Class 5: October 11 – Concepts, Variables, Operationalization and Measurement**

KKV, *Designing Social Inquiry*, Chapter 5

Kellstedt and Whitten, *The Fundamentals of Political Science Research*, Chapter 5

Coppedge, Michael, John Gerring, David Altman, Michael Bernhard, Steven Fish, Allen Hicken, Matthew Kroenig, Staffan I Lindberg, Kelly McMann, and Pamela Paxton. 2011. "Conceptualizing and Measuring Democracy: A New Approach." *Perspectives on Politics* 9: 247-67.

Kitchens, Karin. 2021. "Exit or Invest: Segregation Increases Investment in Public Schools." *Journal of Politics*, 83(1).

Shah, Paru and Nicholas Davis. 2017. "Comparing Three Methods of Measuring Race/Ethnicity." *Journal of Race, Ethnicity and Politics*, 2: 124-139.

### **Class 6: October 18 – Data Collection & Literature Reviews**

KKV, *Designing Social Inquiry*, Chapter 6.

Kellstedt and Whitten, *The Fundamentals of Political Science Research*, Chapter 6

Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis for Political Texts." *Political Analysis* 21: 267-97.

Grimmer, Justin. 2015. "We Are All Social Scientists Now: How Big Data, Machine Learning, and Causal Inference Work Together." *PS: Political Science & Politics* 48: 80-83.

Éric Montpetit, André Blais and Martial Foucault, 2008, "What Does it Take for a Canadian Political Scientist to be Published?" *Social Science Quarterly* 89(3,September): 802-816.

Jeffrey W. Knopf, 2006, "Doing a Literature Review," *PS: Political Science & Politics* 39(1): 127-132.

### **Class 7: October 25 – Sampling, Probability, Hypothesis Testing and Statistical Inference**

Kellstedt and Whitten, *The Fundamentals of Political Science Research*, Chapters 7 & 8.

Gerber, Alan S, and Donald P. Green. 2000. The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment. *American Political Science Review* 94 (3):653-663. (Example of sampling affecting the answers you get).

James D. Fearson, 2011, "Counterfactuals and Hypothesis Testing in Political Science," *World Politics* 43, no. 2 (1991): 169–95.

### **Class 8: November 8 – Experiments - TBD**

Harbridge, Laurel, and Neil Malhotra. 2011. "Electoral Incentives and Partisan Conflict in Congress: Evidence from Survey Experiments." *American Journal of Political Science*. 55(3): 494-510.

Bonilla, Tabitha and Alvin Tillery Jr. 2020. "Which Identity Frames Boost Support for and Mobilization in #BlackLivesMatter Movement? An Experimental Test." *American Political Science Review*, 114 (4): 947-62.

### **Class 9: November 15 – How to be a researcher. Guest speaker - CJPS**

King, Gary. (1995). "Replication, Replication." *PS: Political Science and Politics*, 28(3): 541- 559.

King, Gary. 2006. "Publication, Publication, Publication." *PS: Political Science and Politics* 39 (1):119-25.

Kellstedt and Whitten Chapter 12.

Matthew Lebo. 2016. "Managing Your Research Pipeline." *PS: Political Science and Politics*: [https://www.researchgate.net/profile/Matthew-Lebo/publication/301568686\\_Managing\\_Your\\_Research\\_Pipeline/links/60201ffe45851589398c09b0/Managing-Your-Research-Pipeline.pdf](https://www.researchgate.net/profile/Matthew-Lebo/publication/301568686_Managing_Your_Research_Pipeline/links/60201ffe45851589398c09b0/Managing-Your-Research-Pipeline.pdf)

### **Class 10: November 22 – A Crash Course in Regression**

Kellstedt and Whitten Chapters 9-10.

Huntington-Klein, *The Effect*, Chapter 13.

### **Class 11: November 29 – Extensions of basic regression**

Kellstedt and Whitten Chapters 11-12.

Jamie Carson, Gregory Koger, Matthew Lebo, and Everett Young. 2010. "[The Electoral Consequences of Party Loyalty in Congress.](#)" *American Journal of Political Science* 54:3.

Matthew Lebo, Adam McGlynn and Greg Koger. 2007. "[Strategic Party Government – Party Influence in Congress, 1789-2001.](#)" *American Journal of Political Science* 51:3.

## **Class 12: December 6 – Class Presentations**

Students will present their research proposals and receive prepared feedback from their discussant. Time for open discussion will be set aside for each paper. **RESEARCH DESIGN PAPERS ARE DUE DECEMBER 12.**