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
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:


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](https://staff.washington.edu/lynnhank/Popper-1.pdf)


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


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

KKV, Designing Social Inquiry, Chapter 3.

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


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


**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.

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


**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


**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


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.


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

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


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


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


Kellstedt and Whitten Chapter 12.


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

Kellstedt and Whitten Chapters 9-10.


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

Kellstedt and Whitten Chapters 11-12.


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.**