This course will survey the main elements of research design in the social sciences. After setting the table by considering the nature of the scientific enterprise in political science, we’ll examine the main ways political scientists try to establish causal relationships among variables. We’ll briefly investigate experimental research, which can be useful for studying certain questions in political science, but we’ll spend most of our time on methods for gathering and analyzing observational data. “Data” will be defined broadly to include both quantitative and qualitative sources of information. Over several weeks we will examine the main ways that political scientists attempt to discover causal relationships using observational data.

One can learn research design by reading about different approaches and applying them to actual problems that interest political scientists. Political scientists have written a great deal about how to conduct research and rule out various threats to valid inferences, and we will benefit from reading, discussing, and thinking about some of the insights our predecessors have left us. Another way students can learn research design is by beginning an actual research project and working through the problems that emerge—such as what hypotheses to test, how the proposed research contributes to a body of knowledge, how to collect evidence to test the hypotheses, and how to rule out alternative explanations for the phenomenon in question. We will take this approach, too, and students will be required to develop a research design to investigate a question of their choosing.

Besides covering the basics of research design, the course has a secondary goal of introducing students to the professional aspect of political science. You might think of this element of the class as a guide to “how to succeed in graduate school.” To that end, the course will encourage students to begin thinking about their professional development and the mechanics of finding advisers, forming committees, applying for grants, and submitting articles for publication.

Grading

Grades will be based upon two writing assignments, a research proposal, and class participation. There will also be two short and ungraded assignments.

First Paper : 20%
Second Paper: 20%
Research Proposal: 40%
Class Participation: 20%
Required Texts

Course Schedule
Note: I have listed the readings in the order in which I recommend that you complete them.

**October 3. The political and the science in political science.** What qualifies as “political”? What does it mean to study politics scientifically? Do the natural sciences serve as good models for the social sciences—and if so, which natural science(s)?

*Readings:*


*Readings:*

**October 14. Due date for a short description of the subject of your research proposal.**
October 17. Causality and causal inference. What are the various meanings of causation, and which one(s) are most useful for political scientists? How can we design research so that we can make inferences about causal processes? What evidence would indicate that a proposed causal mechanism is, in fact, the actual mechanism at work?

Readings:

Skim the current academic jobs listings of the American Political Science Association.

October 24. Concepts, indicators, and measurement. The difference between a concept and an indicator. The importance of explicitly connecting an indicator to the concept it stands for. Reliability and validity. Levels of measurement.

Readings:

October 28. First paper due.

October 31. Experimental design. The differences between internal validity and external validity. The kinds of questions for which experiments are the best methodology in political science.

Readings:
November 7. **Statistical Analysis with Non-Experimental Methods.** How to address the limitations of non-experimental methods for making causal inferences. What it means to control for a variable statistically. The difference between correlation and causation.

**Readings:**


November 14. **The Uses and Abuses of Statistical Analysis.** The kinds of questions suitable for quantitative, large-N studies. How to exercise appropriate judgment and discretion when conducting statistical analyses. Major pitfalls to avoid.

**Readings:**


November 21. **Cases, observations, and data collection.** Comparison as a means of making inferences. Case selection and causal inference. Different criteria for choosing the cases to investigate. Methods of data collection.

**Readings:**


Przeworski, Adam, and Frank Salomon, “On the Art of Writing Proposals.”


Readings:


December 2. Second paper due.

December 5. Research ethics. Institutional review boards. The obligations scholars have to their research subjects and their readers.

Readings:


University of Washington, Human Subjects Division, http://www.washington.edu/research/hsd


Jeremy Johnson, “Campaign Experiment Found to be in Violation of Montana Law,” Monkey
Stephan Hamberg, “Electoral Violence in New Democracies: The Institutional Foundations of Peaceful Transitions,” proposal to the National Science Foundation

December 13. Research proposal due.