POSC 349   Political Science Research Methods:
Putting the "Science" Into "Political Science"
Fall, 2015
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Office Hours: MW 1-2, other times by appointment

        This course is an introduction to the methods (primarily quantitative methods) used in political science research. Rather than a "cookbook" approach, the course will follow the pattern of a research project. We will use a topic as a common thread to tie materials together in order to demonstrate how the principles you will learn are actually used. The topic we will use is the influence of campaign contributions on votes cast by Members of Congress. We will discuss other examples in class that cover a wide variety in order to provide breadth to the course materials. However, we will keep coming back to the topic of campaign finance in order to keep a common thread so that we don't lose sight of the big picture.

        The course will proceed in three sections. In the first section, we will discuss the use of formal models in political science to generate hypotheses. Those of you who have taken classes in Economics have probably encountered formal models in some context. Formal models are used in a variety of ways, but the emphasis in this class will be the use of formal models to generate hypotheses that can be tested. We will walk through a few classic formal models, and ultimately use these techniques to generate some predictions about the effects of campaign contributions.

        The second section of the course will focus on research design. We will discuss how to design a research project to test some of the hypotheses we derive in the first section of the course. We will discuss the nature of causation, how we infer it, and how to set up a research project.

        The final section of the course will address the use of statistical models to test the hypotheses from the first section of the course following the guidance from the second section of the course. We will cover a set of simple tools most commonly used for data analysis, and use real campaign finance data to see how well our predictions hold up.

        You will be given problem sets to complete periodically. Deadlines for assignments are strict, and late assignments will not be accepted. The reason is that I will hand out detailed solutions with comments on common problems and misunderstandings when assignments are handed in.

Course grades will be calculated based on the following factors: Mid-term exam (35%), Final Exam (45%), problem sets (20%).

Attendance

Attendance is required. You may miss three sessions. Each absence beyond that will result in a three percentage point deduction from your course grade. Exceptions will only be granted under extraordinary circumstances. To be clear, you do not have three excused absences plus however many doctors' notes you can get. You have three excused absences total, so it would be best to save them for when you are ill. Please contact me as soon as possible if you have an extended bout of serious illness. Attendance and participation are critical.

You are also expected to show up on time. I find it distracting and disrespectful when students walk in after class has begun. You may show up late once during the semester. Each time you show up late beyond that, one percentage point will be deducted from your course grade. The objective is not to punish you for being late. The objective is to get you to show up on time. If you have a class on the other side of campus just before our class, you need to speak with me about it at the beginning of the semester.

Classroom rules

1: Check your ideology at the door. The classroom is not the place to preach. It is a place to keep an open mind.
2: Be respectful. Show up on time, pay attention, participate, and SILENCE YOUR PHONES (personally, I use "airplane mode"). If you fall asleep in class, five percentage points will be deducted from your course grade. You don't get any free passes on this. Drinking heavily caffeinated beverages during class is perfectly acceptable. (I can't teach an early class without coffee). If you don't think you can stay awake, it is also acceptable to say you aren't feeling well, and ask to be excused. Doing so will not count against your permitted absences.

There are no readings for the first section of the class, so lectures will be crucial. The textbook for the third section is Neil J. Salkind, <u>Statistics for People Who (Think They) Hate Statistics</u>. Other readings will be available on the course blackboard page in pdf format.

Section I: Developing a Theory with Formal Models

This section of the course will address the use of formal models in political science as a way to generate theories. There will be no readings for this section of the course since I have yet to find a textbook that I like, hence lectures will be extremely important. If you would like to refer to a textbook on occasion, consider using Morrow's <u>Game Theory for Political Scientists</u>

8/24   Introduction

8/26   The concept of utility and utility functions

8/28-8/31   Spatial voting models

9/2-9/4   NO CLASS- PROFESSOR AT CONFERENCE

9/7   NO CLASS- LABOR DAY

9/9-9/11   Strategic form games and iterated deletion

9/14-9/18   Extensive form games and backwards induction

9/21-9/25   Nash equilibrium

9/28-9/30   Extra time in case we don't get through everything, otherwise, review

10/2   MIDTERM EXAMINATION

Section II: Research Design

10/5-10/9   Causation, its meaning, and how we infer it

        King, Keohane and Verba, <u>Designing Social Inquiry</u>, Chapters 1-3

        Samuelson, "The Worthless Ivy League?" Newsweek, November 1, 1999.

        Campbell and Ross, "The Connecticut Crackdown on Speeding,"

10/12-10/16   Conceptualization and measurement

        King, Keohane and Verba, <u>Designing Social Inquiry</u>, Chapter 5.1

        Wright, "Class Boundaries and Contradictory Class Locations"

Gladwell, "What Stanley Kaplan Taught us about the SAT,"

Section III: Statistics
As with Section I, there is no single textbook I use for statistics, although I use selections from a few different books. Again, lectures will be the most important part of the course here.

10/19   NO CLASS- FALL BREAK

10/21-10/23   Describing data

        Salkind, Chapters 2-4

10/26-10/30   Probability and sampling

        Salkind, Chapter 8

        Morin. "Telling Polls Apart." *Washington Post*, August 16, 2000, p. A35

        The Odds of That, *New York Times Magazine*, 8/11/02

11/2-11/13   Measuring association between two variables and testing hypotheses

        Salkind, Chapters 7 and 9 (on hypotheses and statistical significance)

        Salkind, Chapter 17 (for two discrete variables)

        Salkind, Chapters 11-12 (for one continuous and one discrete variable)

        Salkind, Chapters 15-16 (for two continuous variables)

        Tufte, "Economic and Political Determinants of Electoral Outcomes,"

11/16-11/25   Multivariate analysis

        King, Keohane and Verba, <u>Designing Social Inquiry</u>, Chapter 5.2

        Salkind, Chapter 18

11/27   NO CLASS- THANKSGIVING

11/30-12/4   Extra time in case we don't get through everything, otherwise, review