

POLITICAL ANALYSIS

POLITICAL SCIENCE 2000

Fall 2009

Mondays and Wednesdays 11:00-12:15 in Benton 225

Prof. David Kimball

Email: dkimball@umsl.edu

Home page: <http://www.umsl.edu/~kimball/>

Office Hours: W 3:00-5:00, MW 9:00-11:00, and by appointment

office: 348B SSB

phone: 516-6050

Teaching Assistant: Michael Artime (mra8r3@umsl.edu)

Office: 802 Tower

Phone: 516-7006

Office Hours:

M 9-11, W 1:30-3:30

Econ Lab 452 SSB

INTRODUCTION

Some of the most important political debates come down to questions that can be answered by research. For example, is the death penalty applied fairly? Does democracy promote peace and economic growth? Do school vouchers improve academic performance? In addition, the daily news bombards us with research findings and statistical information frequently used in political science research (public opinion polls, stock market reports, unemployment figures, crime statistics, student test scores, and so on). As a result, it is important to understand how good political science research is conducted, and to be informed about how statistics are used (and misused). Whether we realize it or not (and whether we like it or not), statistics can inform many aspects of everyday life.

This course provides an introduction to some of the basic methods of analysis used in political science research. The emphasis here is on learning how these methods are used to answer important public policy questions. We will examine the quantitative study of politics. Statistics provide a tool (certainly not the only one) to help understand the world. In order to make effective use of these techniques, students will be introduced to several principles underlying quantitative political analysis, including research design, measurement, probability, sampling, hypothesis testing, and control. Students also will gain experience in the analysis of political data. This will be accomplished through in-class exercises using a statistical software package called *Stata*.

No background in statistics, advanced mathematics, or computing is assumed or required, although students will need to use some basic math skills and a calculator. Don't panic! Students only need to know how to add, subtract, multiply, and divide numbers to manage this course.

OBJECTIVES

By the end of the semester, students will be able to: (1) think analytically about social science research; (2) understand the foundations of research design and hypothesis testing in political science; (3) perform basic statistical calculations; (4) interpret and explain statistical results; (5) complete an original social science research project; and (6) use the *Stata* computer program.

REQUIRED BOOKS

Paul M. Kellstedt and Guy D. Whitten. 2009. *The Fundamentals of Political Science Research*. Cambridge University Press.

Philip H. Pollock. 2006. *A Stata Companion to Political Analysis*. CQ Press.

There will be some short articles (available on the MyGateway site for the course) assigned as well.

COURSE REQUIREMENTS

Exams: There will be two midterm exams. The exams will be based on assigned readings and course lectures. Failure to take the exams at the scheduled time, unless excused by the instructor in advance, will result in an F for that exam.

Research Paper: A significant part of your final grade will be based on a paper where you apply some of the methods from this course to conduct research on a topic of interest to you. In consultation with me, you will design and implement your own research project. You must choose a project that will make use of one of the data files listed at the end of the syllabus. The research paper will be completed in stages throughout the semester, with the final product due at the end of the semester. See the “Research Paper” section at the end of this syllabus for detailed information on the paper.

Problem Sets: All students will complete several problem sets during the semester. The problem sets will be like take-home quizzes and will not require the use of the computer. Late problem sets will be penalized one full letter grade for every day they are late.

Computer Labs: Throughout the semester, students will be required to complete several computer lab sessions (scheduled during our regular class time). During these sessions, you will apply the analytic techniques we cover in class to political data (some from the Pollock workbook and some of which I will provide). The data analyses from the lab sessions will be used to complete exercises in which you will be required to report and interpret the findings of your analyses. Late computer assignments will be penalized one full letter grade for every day they are late.

All of your lab analyses will involve using the *Stata* statistical software. The Pollock book provides detailed instructions on the *Stata* program and its commands. The first few exercises you complete will have detailed instructions about how to access the data

and proceed with your analysis. In addition, the program itself has extensive on-line help instructions for the procedures you will use. There is a convenient help button that will give advice if you get stuck in the program. In any event, Michael and I will be here to help with any problems you encounter in the lab sessions. Michael and I will also be available to help with *Stata* during office hours and by appointment.

Attendance and Participation: I expect students to read the assigned materials on time, attend class, and participate in discussions on a regular basis. Understanding political science research methods is like learning a language. The information in this course is cumulative. You will use what you learn in this class throughout the semester. As a consequence, it will be very difficult to understand what we are doing if you are not in class regularly. I will take attendance on ten randomly chosen days during the semester. Students who miss more than two of those days will lose points on the attendance and participation part of their grade. Regular attendance and participation is likely necessary to receive an A for the course.

GRADING

Final grades will be based on the following proportions:

<u>Assignment</u>	<u>Weight</u>	<u>Due date</u>
Midterm Exam 1	15%	Sept. 30
Midterm Exam 2	20%	Nov. 11
Problem Sets/Computer Labs	30%	several
Research Paper	30%	Dec. 9
Attendance	5%	

ACADEMIC HONESTY

I take academic misconduct (plagiarism, cheating, etc.) very seriously, and any cases of cheating or plagiarism will be reported to the university committee on academic misconduct and handled according to university policy. In addition, students will receive a grade of “0” for that assignment. According to the American Heritage Dictionary, plagiarism is “stealing and using the ideas or writings of another as one’s own” (p. 524). If you are uncertain about this definition or how it applies to your work, please come see me.

STUDENTS WITH DISABILITIES

If anyone has a health condition or disability, which may require accommodations in order to effectively participate in this class, please contact me and the **Disability Access Services Office in 144 Millennium Student Center at 516-6554**. Information about your disability will be regarded as confidential.

COURSE OUTLINE

Readings marked with an asterisk (*) are available on the MyGateway site.

I. INTRODUCTION: WHAT IS POLITICAL SCIENCE?

Studying Politics Using the Scientific Method (Aug. 24-31)

Read: Kellstedt and Whitten, chapters 1-3
Pollock, chapter 1
Stephen Dubner, "The Probability that a Real Estate Agent is Cheating You," *New York Times Magazine*, Aug. 3, 2003, p. 23. (*)
Clive Thompson. "The Predictor," *New York Times*, Aug. 16, 2009 (*)
Question: Can politics be studied scientifically?
Lab Monday, August 31 (Introduction to Stata)

II. FORMULATING A RESEARCH PROJECT

Hypotheses, Concepts, Variables, and Measurement (Sept. 2-9)

Read: Kellstedt and Whitten, chapter 5
Adam Liptak, "Does Death Penalty Save Lives? A New Debate," *New York Times*, Nov. 18, 2007, p. A1. (*)
The Economist, "A Ticket for Corruption" (*)
Research Question: Does the death penalty deter crime?
Research Question: How can we measure the level of corruption in a nation?
Lab Wednesday, Sept. 9: Do cookie prices indicate quality?
No Class on Labor Day – Monday, September 7
Research Paper: Topic Due Wednesday, September 9

Research Design: Experiments and Quasi-Experiments (Sept. 14-16)

Read: Kellstedt and Whitten, chapter 4
Margaret Talbot, "Placebo Prescription," *New York Times Magazine*, 1/9/2000. (*)
Richard Nisbett and Dov Cohen, "Men, Honor and Murder," *Scientific American Presents*, 1999, pp. 16-19 (*)
Research Question: Are southern men more violent?
Research Question: Do speeding crackdowns reduce car accidents?

Research Design: Case Studies and Content Analysis (Sept. 21-23)

Read: Bernard Goldberg, *Bias*, 2001, Regnery Press (selections)
Lab Monday, Sept. 21: Is there a liberal bias in the media?
Research Paper: Research Question Due Wednesday, September 23

Literature Reviews and Data Sources (Sept. 28)

Read: Manheim et al., chapters 3 and 4 (*)

Lab Monday, September 28 (Literature Search for Research Papers)

MIDTERM 1: WEDNESDAY, SEPTEMBER 30

Research Design: Surveys (Oct. 5-7)

Read: Herbert Asher, "Polls and Elections" (chapter 7), from *Polling and the Public: What Every Citizen Should Know*, Washington: CQ Press. (*)
Samuel Popkin and Douglas Rivers, "The Unmaking of President McCain" (*)

Research Question: Can polls tell us who will win an election?

Research Paper: Literature Review Due Wednesday, October 7

III. DESCRIPTIVE STATISTICS

Univariate Statistics (Oct. 12-21)

Central Tendency, Dispersion, and the Normal Distribution

Read: Kellstedt and Whitten, chapters 6 & 7
Pollock, chapters 2 & 3
Steven W. Hook, "Domestic Obstacles to International Affairs: The State Department Under Fire at Home" (*)

Lab Wednesday, October 14: Central Tendency

Lab Wednesday, October 21: Variation and the Normal Distribution

Bivariate Statistics (Oct. 26-Nov. 9)

Crosstabulation, Scatterplots, Correlation, and Regression

Read: Kellstedt and Whitten, chapters 8 & 9
Pollock, chapters 4 & 8
Joshua Benton and Holly Hacker, "Cheating May be Pervasive" (*)

Research Paper: Research Design Due Wednesday, October 28

Lab Monday, Nov. 2: Crosstabs

Lab Monday, November 9: Correlation and Regression

MIDTERM 2: WEDNESDAY, NOVEMBER 11

IV. INFERENTIAL STATISTICS

Probability and Samples (Nov. 16-18)

Read: Kellstedt and Whitten, chapter 7
Bernd Beber and Alexandra Scacco, "The Devil is in the Digits,"
Washington Post, June 20, 2009. (*)

Research Question: Are random samples representative of the population from which they are drawn?

Research Question: Can statistics be used to detect election fraud?

Research Paper: Data Analysis Due Monday, November 16

No Class the week of November 23 (Thanksgiving break)

Testing Hypotheses with Sample Information (Nov. 30-December 9)

Statistical Significance

Writing Final Research Papers

Read: Kellstedt and Whitten, chapters 8 & 9
Pollock, chapters 6-8
Johnson and Reynolds, chapter 14 (*)

Lab Monday, November 30 (Chi-Square and Difference-of-Means Tests)

FINAL RESEARCH PAPER DUE WEDNESDAY, DECEMBER 9

Research Paper

For the research paper, you will design and implement your own research project. The project is divided into sections to make the assignment more manageable and to give me several opportunities to provide you with feedback. You will choose your own topic from the list of data files provided at the bottom. Most of the data files are modified from the Pollock workbook. Students will meet with me individually at least twice during the semester to help plan the research strategy and implement it. Listed below are the five assignments that make up the research paper. The due dates for each assignment are listed in your course outline and appear on the assignment calendar I will distribute in class.

1. Topic. One-half page identifying the topic of your research project. You must choose a topic that allows you to use one of the data files listed at the end of the assignment. At this point, your topic may be fairly broad. After I have reviewed your topic, you should schedule a meeting with me to discuss how to proceed.
2. Research question. One page explaining your research question and one or more hypotheses you will test. Be explicit about the concepts you are using and identify your dependent and independent variables clearly.
3. Literature Review. Five page paper examining at least five to seven political science articles that have considered this topic or a closely related topic. The articles must come from a social science journal. (Some examples: *American Political Science Review*, *Journal of Politics*, *American Journal of Political Science*, *American Politics Quarterly*, *Political Research Quarterly*, *World Politics*, *International Studies Quarterly*.) Citations must follow the American Political Science Association Style manual, which will be distributed in class.
4. Research Design. The research design combines some of the earlier research project assignments with new information to create the research proposal and plan. The design should include the following sections:
 - a. Introduction explaining the problem to be studied. This will be a revised version of your research topic assignment.
 - b. Revised literature review describing how the question has been addressed by political scientists in the past. This section should use the literature review you have already submitted as a starting point. You should revise this review based on feedback from me.
 - c. Hypothesis or hypotheses explaining what relationships you expect between the variables you are examining. This means you must clearly explain what the dependent and independent variables will be in your analysis. You will likely use some of the ideas included in your research question assignment in this section.

- d. Information about how you will measure the variables for your study.
 - e. Sources of the data you will need to pursue your research question. Where will you find the data to measure the variables in the way you have suggested? Is it already available? If so, where will you get it? If not, how will you collect it?
5. Data Analysis. This section reports descriptive statistics for the data you collected (central tendency, variation for the dependent and independent variables). In addition, this section reports the results of statistical tests of your hypotheses. Explain whether your hypotheses are supported or not. How certain are you of your findings? This section should be roughly 5 pages long, and it gives me the chance to make sure you are on the right track in the quantitative section of your research project.
6. Final Research Paper. Revised research design with conclusion added. The final project will include a revised version of the previous sections, plus a conclusion. The conclusion should tie the paper together and explain what you would like the reader to conclude about your research. What are the main results? Do the results apply to other situations? What should the reader remember most? Read the chapter from Johnson and Reynolds for an example of an excellent research article.

Data Files for Research Projects

1. 2004 American National Election Study – public opinion survey of Americans
2. 2006 General Election Exit Poll – survey of American voters
3. World data – comparison of 114 countries
4. States data – comparison of the 50 American states
5. Counties data – comparison of American counties
6. 2002 General Social Survey – survey of American adults
7. State of the Cities – data on American cities
8. American National Election Studies Cumulative File – combined surveys of American voters from 1952 to 2004

I will add one or two additional data files to the list.