

# PS 3: Introduction to Empirical Analysis and Quantitative Methods

Fall 2017

Tu-Th 5-6:30pm, 2050 VLSB

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Office hours: Wed 2-4pm

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**Course Description:** This course provides an overview of some of the methods employed in political science research. Its purpose is to familiarize you with the scientific study of politics, and to teach you how to pose and answer empirical research questions using appropriate evidence and arguments. Along the way we will learn about how to formulate and evaluate theories, how to design research to discover whether a particular theory holds up empirically, and some basic research strategies. By the end of the course you should have the tools to critically evaluate the kinds of social science arguments found in everyday life and be able to conduct your own independent research.

**Course Requirements:** Students are expected to attend class regularly, do the assigned reading, complete all exams and homework, and participate in any in-class discussions. The course grade will be based on two in-class midterms, a final exam, homework assignments, and participation in discussion section. The course grade will be determined based on the following formula:

Midterms	40%
Final Exam	30%
Homework	20%
Discussion Section	10%

Homework assignments are due *in hardcopy* at the beginning of lecture on the dates they are due. (Emailed homework will not be accepted.) Late work will be penalized 10% per late day or portion thereof, and will not be graded if turned in more than two days late. Extensions will not be granted without proof of a legitimate medical or personal reason. Please be kind to your GSI by stapling the pages and putting your name at the top of the first page.

You may cooperate on the homework but be sure the work you turn in is your own.

Academic misconduct, also known as cheating and/or plagiarism, will not be tolerated. For information on what constitutes misconduct please see: <http://sa.berkeley.edu/conduct> and <http://asuc.org/honorcode>.

**Section Information:** The GSIs and section information are listed in the table below. (Unless otherwise specified email addresses are @berkeley.edu.) You are not enrolled in the course unless you are enrolled in a section.

Sect #	Time	Location	GSI	Email
101	M 4-6	Hearst Annex B1	Bhumi Purohit	bhumi.purohit@
102	M 8-10am	Latimer 102	Surabhi Yadav	surabhi.y@
103	Th 12-2pm	Etcheverry 3119	Jieun Kim	kimjieun@
104	Th 2-4pm	Barrows 587	Lindsey Moore	lindseymoore@
105	Th 8-10am	Barrows 136	Elizabeth Mitchell	elizabeth_mitchell@
106	M 6-8pm	Barrows 104	Lindsey Moore	lindseymoore@
107	F 8-10am	VLSB 2030	Elizabeth Mitchell	elizabeth_mitchell@
108	F 10-12pm	Wheeler 20	Bhumi Purohit	bhumi.purohit@
109	F 12-2pm	Wheeler 202	Jieun Kim	kimjieun@
110	F 2-4pm	Barrows 151	Bhavik Muni	bhavik.muni@
111	M 10-12pm	Etcheverry 3105	Surabhi Yadav	surabhi.y@
112	M 12-2pm	Wheeler 202	Bhavik Muni	bhavik.muni@

**COURSE READER:** The reader for this course is available at University Copy, 2425 Channing Way (549-2335). Some readings are available on bCourses, and are identified as such.

**BOOK FOR PURCHASE:** The following book is REQUIRED and available for purchase at the ASUC bookstore, near the corner of Bancroft and Telegraph.

Paul M. Kellstedt and Guy D. Whitten, *The Fundamentals of Political Science Research*. Second Edition. Cambridge: Cambridge University Press, 2013.

(Note: There is a first edition of this book floating around. I cannot say how the second edition differs from the first. However, the lectures, assignments, and exams assume the second edition.)

**IMPORTANT NOTE:** New and better readings are always coming to my attention. I therefore reserve the right to add and subtract from the syllabus.

## **Rules of the Road**

1. I realize we live in a wired world, but personal technology is a distraction during lecture and section. Please keep your laptops, smartphones, and other electronic gadgetry off during lecture and section. For note-taking you will need to bring paper and a writing implement. If you have a disability that necessitates electronic assistance, please see me to request an exception. A DSP note will be required.
2. I do not post what passes for my lecture notes online, but I will make lecture slides available on bCourses.
3. I do not allow anyone to make announcements to the class regarding any activity not related to our course.
4. I do not hand out study sheets before exams. Part of mastering the material is learning to distinguish between important themes and incidental facts, a process your GSIs and I are happy to assist you with. Of course we will have review sessions, and are open to all questions. For exams you will be allowed to bring a hand calculator.
5. Please report any suspected errors in the grading of an assignment within three days of receiving the grade. I reserve the right not to effect a grade change if an issue is reported after three days have passed.
6. Syllabi are wonderful documents with lots of information on the time and place of office hours, the dates of exams, and course requirements. Please do not ask for information contained in the syllabus.
7. Unless otherwise specified no appointment is necessary to come to my office hours. Just come! If you are having problems with the material I encourage you to visit your GSI and me during office hours.

## **SCHEDULE OF LECTURES/READINGS/EXAMS**

### **INTRODUCTION**

**Week 1, August 24: Housekeeping**

**Week 2, August 29: Preliminaries: Studying Politics Scientifically**

- Kellstedt and Whitten, Chapter 1.

- John H. Kranzler, *Statistics for the Terrified*. Third Edition. Prentice Hall, 2003, pp. 8-16. (bCourses)
- George Will, "Democracy in Iraq Isn't So Far-Fetched," *The NJ Press of Atlantic City*, September 8, 2003. (bCourses)

## THE ART OF THEORY BUILDING

### **Week 2-3, August 31-Sept 5: Overview of Induction, Deduction, Rational Choice**

- Kellstedt and Whitten, Chapter 2, sections 2.1 through 2.5.
- Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry*. Princeton: Princeton University Press, 1994, pp. 14-19.
- Earl Babbie, *The Practice of Social Research*. Eleventh Edition. Thomson-Wadsworth, 2007, pp. 49-55.
- Kenneth A. Shepsle and Mark S. Bonchek, *Analyzing Politics*. New York and London: W. W. Norton, 1997, pp. 49-53, 57-62. (bCourses)

### **Week 3, Sept 7: Deduction: Spatial Voting**

- Kellstedt and Whitten, Chapter 2, sections 2.6 through 2.8.
- Anthony Downs, *An Economic Theory of Democracy*. New Haven: Yale University Press, pp. 3-14; 21-35.
- Donald Green and Ian Shapiro, *Pathologies of Rational Choice*. New Haven: Yale University Press, 1994, pp. 151-153.
- Kenneth A. Shepsle and Mark S. Bonchek, *Analyzing Politics*. New York and London: W. W. Norton, 1997, pp. 140-144, 251-259. (bCourses)

### **Week 4, Sept 12-14: Deduction: Game Theory (HW 1 due Sept 14)**

- Avinash Dixit and Susan Skeath, *Games of Strategy*. New York and London: W.W. Norton, 1999, pp. 1-22, 24-32, 79-87, 97-99, 107-112.
- Kenneth A. Shepsle and Mark S. Bonchek, *Analyzing Politics*. New York and London: W. W. Norton, 1997, pp. 198-210. (bCourses)

### **Week 5, Sept 19-21: Causality**

- Kellstedt and Whitten, Chapter 2, sections 2.9 and 2.10 (and list of concepts).
- Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry*. Princeton: Princeton University Press, 1994, pp. 99-114.
- Patrick J. Lyons, "You Gotta Believe," *The New York Times*, July 4, 1997.

- Sheryl Gay Stolberg, "Science, Studies, and Motherhood," *The New York Times*, April 22, 2001.
- Kellstedt and Whitten, Chapter 3.
- John Allen Paulos, "Do Concealed Guns Reduce Crime?" ABCNews.com March 1, 2009.
- Henry Brady et al., "Law and Data: The Butterfly Ballot Episode," *PS: Political Science and Politics*, 34:1, 2001, pp. 59-69.

**Week 6, Sept 26: Review Session (HW 2 due)**

**Week 6, Sept 28: Midterm**

**RESEARCH DESIGN**

**Week 7, Oct 3: Experiments**

- Kellstedt and Whitten, Chapter 4, sections 4.1 and 4.2.
- Alan Krueger, "Turning Out the Vote," *The New York Times*, October 14, 2004.
- Thad Dunning, "Improving Causal Inference: Strengths and Limitations of Natural Experiments," *Political Research Quarterly*, Volume 61, Number 2, June 2008, pp. 282-293.

**Week 7, Oct 5: Observational Studies**

- Kellstedt and Whitten, Chapter 4, sections 4.3 and 4.4 (and list of concepts).
- John Gerring, *Social Science Methodology: A Criterial Framework*. Cambridge University Press, 2001, pp. 155-199.
- Raj Chetty, "Yes, Economics is a Science," *The New York Times*, October 21, 2013. (bCourses)

**Week 8, Oct 10: Conceptualization and Measurement**

- Kellstedt and Whitten, Chapter 5, sections 5.1 through 5.8.
- Janet Buttolph Johnson and H.T. Reynolds, *Political Science Research Methods*. Sixth Edition, CQ Press, 2009, pp. 81-85.
- Malcolm Gladwell, "Examined Life: What Stanley Kaplan Taught us about the SAT," *The New Yorker*, December 17, 2001.
- Pamela Paxton, "Women's Suffrage in the Measurement of Democracy: Problems of Operationalization," *Studies in Comparative International Development*, Fall 2000, Volume 35, Number 3, pages 92-111.

- Alan B. Krueger and David Laitin, "Faulty Terror Report Card," *Washington Post*, May 17, 2004, Page A21.

## STATISTICAL METHODS

### **Week 8, Oct 12: Descriptive Statistics**

- Kellstedt and Whitten, Chapter 5, sections 5.9 through 5.12 (and list of concepts).
- John H. Kranzler, *Statistics for the Terrified*. Third Edition. Prentice Hall, 2003, pp. 49-63.

### **Week 9, Oct 17-19: Probability and Sampling (HW 3 due Oct 17)**

- Kellstedt and Whitten, Chapter 6.
- Kranzler, pp. 115-123.
- Janet Buttolph Johnson and H.T. Reynolds, *Political Science Research Methods*. Sixth Edition, CQ Press, 2009, pp. 209-216; 227-240.
- "The Economist: Counting the casualties," *The Economist*, November 6, 2004.
- Charles Wheelan, *Naked Statistics*, Chapters 8-9. (bCourses).

### **Week 10, Oct 24: Review Session**

### **Week 10, Oct 26: Midterm**

### **Week 11, Oct 31-Nov 2: Statistical Inference: Hypothesis Testing**

- Kellstedt and Whitten, Chapter 7.
- Kranzler, pp. 123-127.

### **Weeks 12-13, Nov 7-16: Bivariate Regression**

- Kellstedt and Whitten, Chapter 8.
- Edward R. Tufte, *Data Analysis for Politics and Policy*. Prentice Hall, 1974, pp. 65-77.
- Jeffrey A. Segal and Albert D. Cover, "Ideological Values and the Votes of U.S. Supreme Court Justices," *American Political Science Review*, Vol. 83, No. 2, June 1989, pp. 557-565.

### **Week 14-15, Nov 21, Nov 28: Multiple Regression (HW4 due Nov 21)**

- Kellstedt and Whitten, Chapters 9-10

**Week 15, Nov 30: Review Session**

**Week 16, Dec 5-7: Reading week, but I will hold office hours**

**FINAL EXAM: GROUP 18, FRIDAY, DECEMBER 15, 11:30AM-2:30PM**