

PS 3: Introduction to Empirical Analysis and Quantitative Methods
Fall 2011
M-W 4-5:30pm, 2050 Valley Life Sciences Building

Jason Wittenberg
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Office hours: Tu 10:00am-12:00pm
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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. These strategies include deductive formal modeling, experimentation, and statistical analysis. 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 comprehensive final exam, three homework assignments, and participation in discussion sections. The course grade will be determined based on the following formula:

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

Homework assignments will be handed out in lecture approximately 2 weeks prior to their due dates. They 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 after 5pm on the Friday the week they are due. 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://campuslife.berkeley.edu/conduct>

Section Information: The GSIs and section information are listed in the table below. You are not enrolled in the course unless you are enrolled in a section. Anyone missing either of the first two meetings of their section will be dropped from the course to make room for others who may want to enroll in your section. Priority for getting into the course will be given to graduating senior majors in political science, graduating seniors in majors that require PS 3, and then junior majors.

If you are trying to switch sections, please email both John Henderson (jahenderson@berkeley.edu), who will be coordinating the switches, and also the GSIs that are running the sections that you are transferring from and to. If you are trying to add the course you should attend any and all sections that you can for at least the first week. If you are still balancing other parts of your schedule, you should, at a minimum, email John Henderson and the GSIs for the sections that you can possibly make.

| Section # | Time | Location | GSI | Email |
|-----------|-----------|--------------|------------------|--|
| 101 | M 10-12pm | 174 Barrows | Jongkon Lee | jongkonlee@berkeley.edu |
| 102 | M 12-2pm | 234 Dwinelle | Katherine Michel | katherine_michel@berkeley.edu |
| 103 | M 2-4pm | 243 Dwinelle | C.J. Howard | cjhoward@berkeley.edu |
| 104 | Tu 12-2pm | 105 Dwinelle | Jongkon Lee | jongkonlee@berkeley.edu |
| 105 | Tu 4-6pm | 242 Dwinelle | Mekoce Walker | mekoce@berkeley.edu |
| 106 | W 10-12pm | 130 Wheeler | Mekoce Walker | mekoce@berkeley.edu |
| 107 | W 12-2pm | 185 Barrows | Thomas Kelly | tmkelly@berkeley.edu |
| 108 | W 2-4pm | 104 Barrows | Thomas Kelly | tmkelly@berkeley.edu |
| 109 | Th 8-10am | 234 Dwinelle | Katherine Michel | katherine_michel@berkeley.edu |
| 110 | Th 12-2pm | 105 Dwinelle | John Henderson | jahenderson@berkeley.edu |
| 111 | Th 4-6pm | 85 Evans | C.J. Howard | cjhoward@berkeley.edu |
| 112 | F 10-12 | 155 Barrows | John Henderson | jahenderson@berkeley.edu |

COURSE READER: The reader for this course is available at University Copy, 2425 Channing Way (549-2335).

BOOK FOR PURCHASE: The following book is REQUIRED and available for purchase at the ASUC and/or Ned's, both near the corner of Bancroft and Telegraph.

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

Both the reader and required book will also be available on reserve.

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

Other Rules: I realize we live in a wired world, but personal technology is a distraction during lecture. Please keep your laptops, smartphones, and other electronic gadgetry off during lecture. 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 doctor's note will be required.

SCHEDULE OF LECTURES/READINGS/EXAMS

INTRODUCTION

Week 1, Aug 29: Preliminaries and Overview

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

Week 1, Aug 31: Studying Politics Scientifically

- Kellstedt and Whitten, Chapter 1.
- Henry E. Brady, "Postponing the California Recall to Protect Voting Rights," *PS: Political Science and Politics* 37:1 (January 2004), pp. 27-32.

THE ART OF THEORY BUILDING

Week 2, Sep 5: No class! Labor Day!

Week 2, Sep 7: Overview of Inductive and Deductive Approaches

- Kellstedt and Whitten, pp. 22-31.
- 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.

Week 3, Sep 12: Deduction: Rational Choice and the Spatial Model

- Kellstedt and Whitten, pp. 31-39.
- 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.

Week 3, Sep 14: Deduction: Game Theory

- Avinash Dixit and Susan Skeath, *Games of Strategy*. New York and London: W.W. Norton, 1999, pp. 1-22; 24-32.

Week 4, Sep 19: Deduction: Sequential Move Games

- Dixit and Skeath, pp. 43-53; 56-62.

Week 4, Sep 21: Deduction: Simultaneous Move Games (HW 1 DUE)

- Dixit and Skeath, pp. 79-93; 97-99; 107-115.

Week 5, Sep 26: Criteria for a Good Theory: Is it Causal?

- Kellstedt and Whitten, pp. 40-44.
- 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.

Week 5, Sep 28: Assessing Causality

- Kellstedt and Whitten, pp. 45-66.
- 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, Oct 3: Review

Week 6, Oct 5: Midterm

RESEARCH DESIGN

Week 7, Oct 10: Research Design: Experiments

- Kellstedt and Whitten, pp. 67-77.
- Rebecca Morton and Kenneth Williams, "Experimentation in Political Science," in *Oxford Handbook of Political Methodology*, pp. 339-345.
- 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 12: Research Design: Observational Studies

- Kellstedt and Whitten, pp. 77-85.
- John Gerring, *Social Science Methodology: A Criterial Framework*. Cambridge University Press, 2001, pp. 155-199.

Week 8, Oct 17-19: Conceptualization and Measurement

- Kellstedt and Whitten, Chapter 5 and section 6.2.
- 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 9, Oct 24: Descriptive Statistics (HW 2 DUE)

- Kellstedt and Whitten, Chapter 6.
- John H. Krantzler, *Statistics for the Terrified*. Third Edition. Prentice Hall, 2003, pp. 49-63.

Week 9, Oct 26: Statistical Inference: Probability and Sampling

- Kellstedt and Whitten, Chapter 7.
- 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.

Week 10, Oct 31-Nov 2: Statistical Inference: Hypothesis Testing

- Kellstedt and Whitten, Chapter 8.
- Kranzler, pp. 123-127.

Week 11, Nov 7: Review

Week 11, Nov 9: Midterm

Week 12, Nov 14-16: Bivariate Regression

- Kellstedt and Whitten, Chapter 9.
- 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 13, Nov 21: Multiple Regression I (HW3 3 DUE)

- Kellstedt and Whitten, Chapter 10.

Week 13, Nov 23: TBA

Week 14, Nov 28: Multiple Regression II

- Kellstedt and Whitten, Chapter 10.

Week 14, Nov 30: Review

Week 15, Dec 5-7: Reading week, but I will hold office hours

FINAL EXAM: GROUP 13, THURSDAY, DECEMBER 15, 8-11AM