PS 3: Introduction to Empirical Analysis and Quantitative Methods

Fall 2017
Tu-Th 5-6:30pm, 2050 VLSB
Version 8/17/2017

Jason Wittenberg
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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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterms</td>
<td>40%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Discussion Section</td>
<td>10%</td>
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</tbody>
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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.

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


(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.
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.

Week 3, Sept 7: Deduction: Spatial Voting

- Kellstedt and Whitten, Chapter 2, sections 2.6 through 2.8.

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


Week 5, Sept 19-21: Causality

- Kellstedt and Whitten, Chapter 2, sections 2.9 and 2.10 (and list of concepts).
• Kellstedt and Whitten, Chapter 3.

**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.

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

• Kellstedt and Whitten, Chapter 4, sections 4.3 and 4.4 (and list of concepts).

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

• Kellstedt and Whitten, Chapter 5, sections 5.1 through 5.8.

STATISTICAL METHODS

Week 8, Oct 12: Descriptive Statistics

• Kellstedt and Whitten, Chapter 5, sections 5.9 through 5.12 (and list of concepts).


• Kellstedt and Whitten, Chapter 6.
• Kranzler, pp. 115-123.
• 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.

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