

# THE SCIENTIFIC STUDY OF POLITICS

POL 51 | WINTER 2020  
Professor Rachel Bernhard  
ribernhard@ucdavis.edu

## Classes

Jan. 6-Mar. 20

Lecture: Tuesday and Thursdays, 4:40 - 6:00 pm | Wellman 126

Discussion: A01, Monday, 3:10 – 4:00 pm | A02, Wednesday, 3:10 – 4:00 pm | A03,  
Tuesday, 1:10 – 2:00 pm | A04, Tuesday, 2:10 – 3:00 pm | all in Kerr 451

## Office Hours

Fridays, 1:00-5:00 pm | 576 Kerr Hall

Book a slot: <https://doodle.com/mm/racheliveyvelazquezbernhard/office-hours>

## Teaching Assistants

Oakley Gordon, [obgordon@ucdavis.edu](mailto:obgordon@ucdavis.edu), office hours TBD

Tzu-Ping Liu, [tpliu@ucdavis.edu](mailto:tpliu@ucdavis.edu), office hours TBD

## Overview

How do we do the “science” part of political science? The answer isn’t as straightforward as you might think from looking at polls in the news. In this class, we will learn the basics of research using the scientific method, both quantitative and qualitative, as well as common pitfalls.

This class falls into four main parts. In Part I, we will learn how to develop good questions and answer them using the scientific method, as well as common perils in research that attempts to make causal claims. In Part II, we will explore quantitative research designs and their trade-offs. In Part III, we will learn the basics of analyzing and visualizing relationships in quantitative data. In Part IV, we will turn to surveys and qualitative research, with an eye to the particular challenges of their implementation. Finally, in Part V, we will discuss researcher ethics and the media’s use of research.

The course uses one required textbook, Political Science Research Methods (9th edition, CQ Press), by Janet Buttolph Johnson, H. T. Reynolds, and Jason D. Mycoff. New and used copies are fine, as are paper and e-copies. There will also two copies on reserve at Shields Library available for a 2-hour loan period. All other reading material for the course will be available electronically for free through Canvas.

## ASSESSMENT

### Lecture Participation | 10%

The primary form of lecture participation measured is a weekly reading question. Each week, you are responsible for posting one or more questions on that week's readings to Canvas by Monday at 11:59 pm.

During class, please silence and put away all devices: cell phones, tablets, laptops, etc. If you bring an internet-connected device to each class, I reserve the privilege of asking you to look things up online, if necessary; thus, you should perceive your computer screen as "public space" during class time. Please do not load anything that might be perceived as inappropriate or offensive: do your part to make the classroom a learning environment.

I strongly recommend you take notes on paper if possible; the research is clear that we are all highly distracted by our devices. The longer you have yours out in front of you, the more tempted you will be to attend to the world outside of class. We only have 30 hours together, and this time is dearly purchased—by you, by your families, or by your country. I take these sacrifices seriously and expect you to do the same.

More broadly, the subject matter of the class demands that you be respectful and kind to yourselves and to your classmates as we struggle with difficult topics. This class offers a space to learn and discuss the challenges of research. Those who are unkind to others, whatever their perspective, will be asked to step away from class.

### Section Participation | 10%

Your participation can take many forms, both verbal and virtual; each TA will set their own requirements and expectations. If you are not comfortable speaking much in class, be sure to attend office hours and participate in Canvas discussions, because there are no extra credit assignments available to boost your grade otherwise.

Section attendance is strongly encouraged; your participation in every class counts. Participation points are awarded for thoughtful questions or answers that show you have done the reading and for helping your classmates during group work. Interrupting, talking over, or being otherwise disrespectful of your classmates will negatively affect your participation grade.

If you must miss class, I strongly encourage students to be proactive in letting your TA know if something happens—a health or family event—that may affect your work, *even if it doesn't result in an absence*. Sometimes, events and situations may affect your work for longer or harder than you initially anticipate, and it is much easier for us to work with you to find solutions ahead of time than try to "fix" things after it has become a problem.

### Midterm Exam | 20%

This in-class exam, on Tuesday, February 11, covers all information from the textbook and lectures up to the date of the midterm. The test will include multiple choice, fill-in-the-blank, and short answer questions.

**Final Exam | 15%**

This exam, during the scheduled exam time on Wednesday, March 18, covers all information from the textbook and lectures from the midterm onwards (fewer classes—hence the lower grade percentage). Like the midterm, the final will include multiple choice, fill-in-the-blank, and short answer questions.

**Poster Presentation | 45%**

The poster presentation comprises the largest portion of your grade and will require you complete multiple assignments throughout the term:

1. Research question (5%): what do you want to know about your topic? Ask a question that defines the problem or issue you want to study. Your TAs will give you feedback on your RQ that you can use to “sharpen” your question before pursuing the next step: the literature review.
2. Literature review (10%): what have others said about your topic? Provide an annotated bibliography of 8-10 sources (peer-reviewed articles or books). For each source, you should have approximately 4 sentences of description that summarizes the authors’ argument, their data, how they analyzed their data, and what they found.
3. Brief (10%): a max (shorter is better!) 750-word essay that A) summarizes key facts people need to know about your topic/problem, B) describes what you think the takeaways are, and C) advocates for or against a relevant policy or the status quo based on what you’ve found. Good briefs will use concise sentences, informal language, and make clear why your topic is relevant to current politics.
4. Poster (20%): your poster draws together the previous three elements and presents them in a visual form to your classmates. Your poster should have a catchy headline, list your research question, and have eye-catching, easy-to-read charts, visuals, side-bars, and bullets describing the key facts (what is currently known about your topic). It should be precise and include citations. Your 36”x48” poster will be printed through the Undergraduate Research Center at my expense, and during the last week of class, you will present your poster to the rest of the class.

More detailed information on the exams and poster presentation components will be provided throughout the class.

**Other Policies**

If you are a parent and your childcare falls through, you are welcome to bring your child or infant to class provided they are able to be present without disrupting class. Similarly, if you are nursing, you are welcome to breastfeed in class.

Please include “POL 51” in the subject line of your emails; if you do not, your email is likely to end up in the wrong folder and may be missed. I will try to respond to emails within 48 hours during the week or 72 hours over the weekend, and I usually respond to student emails each afternoon. In both class and via email, you can address me as “Professor Bernhard” or “Dr. Bernhard;” your TA should be addressed as “Mr./Ms. So-and-So” unless you hear otherwise from them.

If you need disability-related accommodations in this class, and/or if you have emergency medical information that you wish to share, and/or if you need special arrangements in case the building must be evacuated, please inform me immediately. Please see me privately after class or during office hours. For disability-related accommodations, you must also obtain an accommodations letter (<https://sdc.ucdavis.edu>), which will be sent directly to me.

As a UC Davis student, we trust you to conduct your academic affairs ethically. Betrayal of that trust will not be tolerated. Cheating includes, but is not limited to, bringing notes or written or electronic materials into an exam, using notes or written or electronic materials during an exam, having someone write an exam or assignment for you, or using someone else's written work or materials without appropriate citations (plagiarism). I take violations of academic integrity seriously. If you have questions about how best to cite another's work or facts in the public domain, please write your TA. When in doubt, cite. I recommend the Chicago Manual of Style's author-date format if you don't have a favorite. If you have questions about whether an action qualifies as misconduct, please talk to me.

### **Grading**

All assignments save participation will be graded anonymously through Canvas. This is to prevent any unconscious bias entering the grading. For each assignment, I will provide you with a rubric well in advance of the due date. Your TA will grade your assignments and submit the grades to me before we return the assignment to you; this is to standardize all grades and reduce the possibility of error. If you believe an error has occurred, you may request a re-grade from me, in writing, no later than one week after you received the assignment grade. If I believe an error has occurred, I will re-grade the assignment from scratch; otherwise, I will defer to the original grade. Be aware that I am a much harsher grader than your TAs.

Late assignments will receive a penalty of 10% (e.g., from a 95% to an 85%) for every day late. All grades will be rounded up (e.g., an 89.50% will become a 90%). Letter grades will be assigned as follows:

97+	A+	87-89	B+	77-79	C+	67-69	D+	<60	F
93-96	A	83-86	B	73-76	C	63-66	D		
90-92	A-	80-82	B-	70-72	C-	60-62	D-		

### **Assignment Schedule**

Jan 16 | Poster Research Question due

Feb 3 | Poster Literature Review due

Feb 11 | Midterm Exam

Feb 27 | Poster Brief due

Mar 3 | Poster due to Undergraduate Research Center (pick up printed poster March 9)

Mar 10 | Poster Day 1 (for sections A01 and A02)

Mar 12 | Poster Day 2 (for sections A03 and A04)

Mar 17 | Final Exam

## **COURSE OUTLINE**

### **Jan. 7 | Introduction**

Read: this syllabus!

### **Jan. 9 | The Scientific Method**

Read: Political Science Research Methods (PSRM), Chapter 2  
Introductory Statistics: A Conceptual Approach Using R by William B. Ware, John M. Ferron, and Barbara M. Miller, Chapter 1

### **Jan. 14 | Research Questions**

Read: PSRM Chapter 3  
Social Science Methodology: A Unified Framework (2<sup>nd</sup> Ed.) by John Gerring, p. 37-57

### **Jan. 16 | Concepts and Measurement**

Read: PSRM Chapter 4

### **Jan. 21 | Correlation vs. Causation**

Read: PSRM Chapter 6

### **Jan. 23 | Experiments**

Read: Experimental and Quasi-Experimental Designs for Research by Donald T. Campbell and Julian C. Stanley, p. 6-26

### **Jan. 28 | Quasi- and Natural Experiments**

Read: PSRM Chapter 9

### **Jan. 30 | Observational Studies**

Read: PSRM Chapter 11

### **Feb. 4 | Statistical Analysis**

Read: PSRM Chapter 12

## **Feb. 6 | Data Visualization**

Watch: David McCandless, TED Talk,  
[https://www.ted.com/talks/david\\_mccandless\\_the\\_beauty\\_of\\_data\\_visualization?language=en#t-1069928](https://www.ted.com/talks/david_mccandless_the_beauty_of_data_visualization?language=en#t-1069928)

## **Feb. 11 | MIDTERM EXAM**

Review prior readings and your notes!

## **Feb. 13 | Mental Health Day (no class)**

## **Feb. 18 | Surveys**

Read: PSRM Chapter 10

## **Feb. 20 | Sampling**

Read: PSRM Chapter 5

## **Feb. 25 | Question Wording**

Read: PSRM Chapter 7

## **Feb. 27 | Interviews and Ethnography**

Read: PSRM Chapter 13

## **Mar. 3 | Ethics**

Read: PSRM Chapter 8

## **Mar. 5 | Research in the Media**

Read: "What Is Political Science For?" by Jane Mansbridge  
"Motivated Numeracy and Enlightened Self-Government" by Dan M. Kahan, Ellen Peters, Erica Cantrell Dawson, and Paul Slovic

## **Mar. 10 | POSTER SESSION 1**

## **Mar. 12 | POSTER SESSION 2**

## **Mar. 18 | FINAL EXAM**

Syllabus references and credits are due to: Amber Boydstun, Chris Hare, Ben Highton, Mirya Holman, Brad Jones, Andrew Little, Liliana Mason, Laura Stoker, Mark Verbitsky, and Sherry Zaks.