POLS 300: Research Methods in Politics and Public Policy
Occidental College

Fall Semester, 2022
Mondays, Wednesdays, and Fridays
11:45-12:40
Room: Johnson 203

Instructor: Dr. Isaac Hale (he/him)
Email: halei@oxy.edu
Office Hours: Monday/Wednesday/Friday, 10:00 – 11:00 AM
Office: Johnson Hall 308

Student Preceptor: Codey Carr (he/him)
Email: ccarr@oxy.edu
Office Hours: Tuesday/Thursday, 3:00 – 4:00 PM
Office: TBA

Class Discord Invite URL: https://discord.gg/KQxzJ3Ek3w

Course Description

If what you care about is politics, why take a class on research methods? Many of you may be asking yourselves this very question as you begin this class! Many of us are drawn to political science because of the big topics it can help explain: war & peace, election outcomes, representation, policymaking, etc. However, it is almost certain that you have checked out an election forecast (like *FiveThirtyEight*), heard an argument about how demographics shape politics, or witnessed a pundit proclaim confidently what the causes and implications of our political climate are. All of these are examples of political data being used (or misused!). Understanding politics at more than a surface level requires more than reading the newspaper, watching cable news, or following your favorite pundit on Twitter. Today, being a sophisticated political analyst means having not only having knowledge about politics but also being able to interpret and explain political data.

To this end, this introductory research methods class is designed to teach you the basics of contemporary political analysis. We will learn how theoretical concepts are measured, how we can collect data, and the basics of data visualization. We will also learn how we can test hypotheses about real-world political phenomena. This class will teach you how to test for associations between to variables as well as how to determine whether that relationship might be *causal*.

To succeed in this class, you will need to complete four problem sets as well as design, implement, and present a poster project. To succeed in this class, you will need to keep up with the assigned reading (listed at the end of the syllabus), which is highly pertinent to the subjects covered in class.

It is important to note that this class is *NOT* a pure statistics course. Yes, we will learn many important statistical concepts, but we will not be spending our time writing proofs, doing math by hand, or learning the nuts-and-bolts of every statistical concept explored in class. In short, do not feel afraid if math is not your favorite subject! If you maintain a positive attitude, work hard, come to class, and ask questions, you

will most likely succeed. Do not be shy to speak up, even if you are not certain about something. There is no penalty for asking a question – and almost always other students will have the same question!

Course Objectives
The student learning outcomes for this course are as follows:

- Identify best practices for research design, including rigorous hypothesis testing
- Gain knowledge about a wide variety of quantitative and qualitative methods, including surveys, interviews, observational studies, and large-N statistical analysis
- Unpack the logic and meaning of core statistical concepts, including probability, correlation, and causation
- Acquire programming skills in Stata, including data management, data visualization, and regression
- Improve data literacy, including the student's ability to identify misleading presentations of data
- Produce and present a poster demonstrating the student's mastery of the preceding objectives. This poster is intended to improve students' independent research skills and focus their research agenda.

Course Preceptor
We are fortunate to have POLS major **Codey Carr** joining us a preceptor. He has already taken POLS 300 and is versed in the concepts and tools we'll be engaging with in this course. Consider Codey as an additional resource – you can attend his office hours and email him questions (as you would me). He will also assist us in class on programming days. Please note that any concerns about grading, student conduct, or assignment deadlines should be communicated directly to me.

Assignment Deadlines
The following are the due dates for every assignment you will submit in this course. **There is no final exam**. Assigned readings are listed at the end of the syllabus.

Each of the following assignments is due at **midnight** (11:59 PM), with the exception of the in-person presentation of the poster on December 5th:

Assignment	Due Date
Run Stata on your laptop	Before first programming day
Poster project: research question	Sunday, September 11th
Poster project: research design	Sunday, September 25th
Problem set 1	Sunday, October 2nd
Poster project: literature review	Sunday, October 9th
Problem set 2	Sunday, October 16th
Problem set 3	Sunday, October 30th
Poster project: brief	Sunday, November 13th
Poster project: PDF due on Moodle	Monday, November 28th
Poster project: presentation	Monday, December 5th

Textbooks

There are two <u>required</u> texts for this course.

- Daniels, Lisa & Nicholas Minot, 2020. *An Introduction to Statistics and Data Analysis Using Stata: From Research Design to Final Report.* SAGE Publications.
- Wheelan, Charles, 2013. *Naked Statistics: Stripping the Dread from the Data.* WW Norton & Company.

Class Expectations

Credit Hour Policy
POLS 300 is a 4-unit course. On average, you should expect to spend at least twelve (12) hours a week (including in-class time) on this course.

Online Access
All readings and documents for this course (except the textbooks) can be accessed through the Moodle website or via hyperlinks in the syllabus schedule. Messages will be sent by me via Moodle, so make sure you have email notifications for Moodle messages activated.

Email
Codey and I welcome questions and comments by email. When you email us, you should compose your email as you would any piece of professional correspondence. We will respond to your emails as quickly as possible, but please do not expect a quick response to email sent on weekends or after 5pm on any day.

Lecture Slides
Slides will be used in class on most days. Slides will be posted to Moodle following the class session.

Class Discord
There is a Discord channel for this class. Participation is not required. You may use it to ask me questions, chat about the class, talk politics, and socialize. While you are encouraged to discuss class material with each other, please keep in mind that you are expected to complete your assignments individually. You may join using the following link: https://discord.gg/KQxzJ3Ek3w

Desk Name Tag (yes, this is required)
To facilitate discussion, I ask that you place a name tag on the desk in front of you in class each day. Although attendance will not be taken, showing up to class with your desk name tag will greatly affect your participation grade. One way to make this name tag is to take an 8½ x 11-inch piece of construction paper or lightweight cardboard, fold it in half lengthwise (so it's now 4¼ x 11 inches), and write your name on one side so that your name is upright when you put the folded piece of paper like a tent on the desk in front of you. Please write your full name (**FIRST AND LAST**—using whatever name you prefer to be called as your first name) in **LARGE, VERY DARK, BOLD** letters. I will bring nametag supplies on the first day of class.

Lab Days
We will have in-class programming labs throughout the semester (usually on Fridays). We will be learning how to use Stata for data visualization, data management, and statistical analysis. Please bring your laptop to class on programming days. These labs will provide you with the skills necessary for your poster project.

Software

This is *not* a "pure" statistics course; however, we cover a large amount of statistical material in this class. As such, you will need to learn to use a software package called Stata. Stata is a powerful tool for statistical analysis, data management, and data visualization. It is widely used in political science and economics.

To interface with Stata through Oxy (and free of charge!), you must access it through ITS's Virtual Computer Lab. To learn all about the Virtual Computer Lab, visit: www.oxy.edu/academics/faculty/resources-faculty/academic-continuity-planning/virtual-computer-lab.

It is crucial that you run Stata on your personal laptop *before* September 9th (the first lab day). We will not have time in class to get Stata running on your computer, so please contact ITS or come to my office hours before September 9th if you are having difficulty. A guide to accessing Stata is posted to the class Moodle page.

Laptops and Other Electronics

On programming days, we will practice Stata in the classroom and will also be learning some statistics. Students are expected to bring their laptop with them to class on programming days. If you need a computer for this course, you may request a loaner laptop via this form: https://oxy.freshservice.com/support/catalog/items/108 and check it out via the Library Information Desk at the Academic Commons. The laptops are Dell PCs and set up with access to the virtual computer lab software (e.g., SPSS, Stata, Matlab etc.).

On normal class days (labs are an exception!), laptops are not allowed in class. Numerous studies confirm that students who take notes by hand retain more information over time and that laptop bans improve student engagement in smaller classes. It is also far less distracting to others when there is not constant typing and visual distraction going on during a lecture/discussion. As such, laptops, phones and other electronic devices are not allowed in class.

If you have a documented learning disability that is helped by typing your notes, contact me and I will be happy to consider an exception. Furthermore, if you have a very compelling reason why you strongly prefer to take notes during lecture with a laptop, you may write me an email letting me know, and we can discuss the matter individually. Any laptops approved for use in-class must not be used for web surfing during class.

You may bring an e-reader, tablet, or another "lie-flat" device to access readings in class. You may not use it for tasks such as surfing the web or email. You may of course bring printouts of the readings to class.

Grading

Grading for this course will be calculated as follows:

Problem Sets (3x)	30%
Poster Project (5x graded components)	60%
Class Participation	10%
Total:	**100%**

The final letter grade will be assigned according to the standard table:

93-100: A	87-89: B+	77-79: C+	67-69: D+
90-92: A-	83-86: B	73-76: C	60-66: D
	80-82: B-	70-72: C-	00-59: F

If you are 0.5 points or less from the next letter grade at the end of the course, the grade submitted to the registrar will be rounded up to the next letter grade. You will not be able to see this rounding on Moodle.

All graded items listed above are detailed in the sections that follow.

Problem Sets

In this course you will have three problem sets wherein you will practice using Stata and applying tools taught in the class. Some assignments will be more involved than others, but none of them should take you more than a few hours complete. Instructions for each assignment will be provided in class as well as posted on Moodle. All assignments must be submitted on Moodle.

For all submissions, please be sure to include any Stata code you used in a .do file uploaded to Moodle. This way I can easily see your answers as well as check on the code if something went wrong.

Participation

Your participation grade will be based on the overall effort you put into the class, including the effort you put into your assignments, your attendance in class (and having a desk tag!), and your participation in discussions. Come to class, participate in class discussions, earn a good participation grade, and get more out of the class. It's a win-win. You are also encouraged to bring up news stories, relevant examples, and "dank" methods memes.

Poster Project

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. This should be no longer than one paragraph. I will give you feedback on your research question that you can use to "sharpen" (or change) your question before pursuing the next step.

2. **Research design** (5%): Complete the research design worksheet posted on Moodle. You will identify the data set you will use to address your question as well as your dependent and independent variables.
3. **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.
4. **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/policy.
5. **Poster presentation** (30%): your poster draws together the previous 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, sidebars, 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 DOCS at my expense, and during the final exam period, we will have an in-person poster session where you take turns asking and answering questions of each other's posters. Your black-and-white poster PDF is due in Moodle by Monday, November 28th at 11:59 pm. Posters will be presented in-person in Sycamore Glen on the last day of class, Monday December 5th. If we are not in-person at that time or there are restrictions on large gatherings, we will switch to an online poster session instead.

Rubrics and more detailed information on the poster presentation components will be provided throughout the class.

Extra Credit Meme

You may earn extra credit by creating and submitting a meme related to course content. The extra credit is worth up to two points on your final grade (e.g., raising an 88% final grade to a 90%). In order to receive full credit, the meme must be used correctly! I suggest using https://knowyourmeme.com to make sure you are using your meme correctly. You can create memes using meme generators such as https://imgflip.com/memegenerator. Your meme may be shared in class, so be creative!

- The meme is due Wednesday, November 30th at 11:59 PM

Late Submissions

Do not wait until the night before it is due to begin to work on an assignment. Life is complicated and full of unexpected surprises. Plan for uncertainty by managing your time efficiently. Even if your work is not complete because something unexpected interfered, submit what you have accomplished prior to the emergency. After-the-fact extensions will be granted only under extreme circumstances, and at my sole discretion.

If you know in advance that you will miss an assignment deadline, you may submit a partially completed assignment early — and then appeal for an extension.

Assignments submitted late will have 10% deducted from their final score for every day they are late. This penalty begins immediately following the day and time the assignment is due and will not be prorated. Late poster PDFs will not be accepted due to printing deadlines.

Grade Appeals

If you are not satisfied with the grade you receive on an assignment, please take the following steps:

1) Review any comments/feedback I have provided.
2) If you still have questions, come to my office hours, or contact me by email.
3) If you still believe the grade you received is in error, submit a one-paragraph written request for a regrade by email. If the request is approved, your work will receive a completely new evaluation by me. Your score may increase, decrease, or stay the same.

Disabilities

Students with documented disabilities and learning differences who are registered with Disability Services are required to present their accommodation letter to the instructor at the beginning of each semester, or as soon as possible thereafter. Do not wait until just before an assignment deadline to inform me of a need for accommodations. Students are encouraged to contact or meet with the instructor to discuss how accommodations can support them in meeting the course learning objectives. Any student who has, or thinks they may have, a physical, learning, or psychological disability may contact Disability Services at accessibility@oxy.edu to learn about available services and support. More information is available at http://www.oxy.edu/disability-services.

Academic Dishonesty

Academic Integrity is a shared community value. It is built around trust and respect between members of the Occidental Community and embodies a commitment to honesty and integrity in every aspect of one's academic life.

All members of the Occidental community are committed to uphold the highest degree of academic integrity. Unless stipulated otherwise, the academic work done for all assignments is expected to be the student's own; students are expected to give proper credit to the ideas and work of others.

Generally speaking, you must cite the person at the end of the sentence in which you use another person's idea. When you use a specific phrase, you must put that phrase in quotation marks and cite the original author at the end of the sentence in which you use the phrase. If you wish to submit a piece of writing that you have used in another class, you must receive my permission before doing so.

Signing the Academic Integrity Commitment at the beginning of every semester represents a student's affirmation to uphold the shared values of honesty and integrity. When signing the Integrity Commitment associated with work in a course, students are affirming that they have not cheated, plagiarized, fabricated, or falsified information; nor assisted others in these actions.

Support Services

A number of services are available here at Occidental College to make sure that you excel in your academically and socially.

There are a number of opportunities for **academic support**. Please visit the following website at https://www.oxy.edu/academics/student-success to see the variety of services offered, including writing support, tutoring, research assistance, language tutoring, and academic coaching.

The Emmons Wellness Center provides **medical services and counseling**. Visit their website for information on specific services provided: https://www.oxy.edu/student-life/resources-support/emmons-wellness-center

Accommodations for Reasons of Faith and Conscience
Consistent with Occidental College's commitment to creating an academic community that is respectful of and welcoming to persons of differing backgrounds, we believe that students should be excused from class for reasons of faith and conscience without academic consequence. While it is not feasible to schedule coursework around all days of conviction for a class as a whole, faculty will honor requests from individual students to reschedule coursework, to be absent from classes that conflict with the identified days. Information about this process is available on the ORSL website: https://www.oxy.edu/student-life/resources-support/orsl/academic-accommodations

Sexual Harassment and Assault Resources
In the event that you write or speak about having experienced discrimination or harassment on the basis of a protected characteristic or sexual misconduct (including sexual assault, dating/domestic violence, stalking, sexual exploitation or any other form of sexual and/or gender-based harassment), as a designated Responsible Employee, I must inform the Civil Rights & Title IX Office. They will contact you to let you know about resources and support services at Oxy, as well as reporting options both on and off-campus. You have no obligation to respond to the Civil Rights & Title IX Office or to meet with them to discuss support services and reporting options.
If you do not want the Civil Rights & Title IX Office contacted, instead of disclosing this information to your instructor, either through conversation or a class assignment, you can speak confidentially with:

- Oxy's Survivor Advocate, Project SAFE (survivoradvocate@oxy.edu)
- Emmons Counseling (For appointments, call: 323-259-2657)
- Rev. Dr. Susan Young, Office of Religious and Spiritual Life (myoung@oxy.edu)
- Oxy 24/7 Confidential Hotline (323-341-4141)

The College's civil rights policies, along with additional resources, can be found at: https://www.oxy.edu/civil-rights-title-ix. If you would like to contact the Civil Rights & Title IX Office directly, you may email Civil Rights & Title IX Coordinator Alexandra Fulcher at afulcher@oxy.edu or call 323-259-1338.

Weekly Topics & Readings

The list below indicates reading assignments and class topics. All readings (excluding the two required textbooks) will be available on Moodle or linked below. You should do each day's readings <u>before</u> that day's class. I'll generally keep us on schedule but note that discussions may bleed over from one class to the next.

Date	Topics	Readings Due
Week 1		
Wed, Aug 31	Course Introduction (AKA "why should we care about methods?")	• Read the syllabus! • *Naked Statistics: Stripping the Dread from the Data*, introduction o This book will henceforth be shorthanded in the syllabus to "*Naked Statistics*"
Fri, Sep 2	The Scientific Method	• *An Introduction to Statistics and Data Analysis Using Stata: From Research Design to Final Report*, chapter 1 o This book will henceforth be shorthanded in the syllabus to "*Statistics and Data Analysis Using Stata*" • *Naked Statistics*, chapter 1
Week 2		
Mon, Sep 5		**LABOR DAY – NO CLASS**
Wed, Sep 7	Research Questions	• MOODLE: Johnson, Janet B., H. T. Reynolds, and Jason D. Mycoff. 2015. "Chapter 3: Beginning the Research Process," in *Political Science Research Methods*. CQ Press.
Fri, Sep 9	**Programming Day!** TOPIC: Stata basics	• *Statistics and Data Analysis Using Stata*, chapter 4

Week 3		
Mon, Sep 12	Measurement (part 1)	• *Naked Statistics*, chapter 2 • Huntington-Klein, Nick. 2022. "Chapter 3: Describing Variables," in *The Effect: An Introduction to Research Design and Causality*. Routledge. o Read through section 3.4 (you may skip section 3.5, "Theoretical Distributions")
Wed, Sep 14	Measurement (part 2)	• *Naked Statistics*, chapter 3 • Gunitsky, Seva. "How Do You Measure 'Democracy'?" In *Washington Post: The Monkey Cage Blog* o Alternate access link: https://archive.ph/fTbeL
Fri, Sep 16	**Programming Day!** TOPIC: basic data management	• *Statistics and Data Analysis Using Stata*, chapter 5 (you may skip 5.3.4, "Egen") • "Using **IF** with Stata Commands | Stata Learning Modules." UCLA: Statistical Consulting Group.
Week 4		
Mon, Sep 19	Correlation, Causation, and Experiments (part 1)	• *Naked Statistics*, chapter 4 • Huntington-Klein, Nick. 2022. "Chapter 6: Causal Diagrams," in *The Effect: An Introduction to Research Design and Causality*. Routledge.
Wed, Sep 21	Correlation, Causation, and Experiments (part 2)	• *Naked Statistics*, chapter 13 • *Harvard Business Review*, "Beware Spurious Correlations"
Fri, Sep 23	**Programming Day!** TOPIC: descriptive statistics	• *Statistics and Data Analysis Using Stata*, chapter 6 • "Descriptive Information and Statistics | Stata Learning Modules." UCLA: Statistical Consulting Group.
Week 5		
Mon, Sep 26	Probability (part 1)	• *Naked Statistics*, chapter 5 • *Naked Statistics*, chapter 5 ½
Wed, Sep 28	Probability (part 2)	• *Naked Statistics*, chapter 6
Fri, Sep 30	**Programming Day!** TOPIC: subsetting, collapsing, and reshaping	• "Subsetting Data | Stata Learning Modules." UCLA: Statistical Consulting Group. • "Collapsing Data Across Observations | Stata Learning Modules." UCLA: Statistical Consulting Group. • "Reshaping Data Wide to Long | Stata Learning Modules." UCLA: Statistical Consulting Group.

		• "Reshaping Data Long to Wide | Stata Learning Modules." UCLA: Statistical Consulting Group.

Week 6		
Mon, Oct 3	The Central Limit Theorem	• *Naked Statistics*, chapter 8
Wed, Oct 5	Inference	• *Naked Statistics*, chapter 9
Fri, Oct 7	**Programming Day!** TOPIC: t-tests	• *Statistics and Data Analysis Using Stata*, chapter 8 • *Statistics and Data Analysis Using Stata*, chapter 9
Week 7		
Mon, Oct 10		**FALL BREAK – NO CLASS**
Wed, Oct 12	Observational Studies	• MOODLE: Dickovick, J. T., Eastwood, Jonathan. 2016. "Chapter 1: The Comparative Approach: An Introduction," in *Comparative Politics: Integrating Theories, Methods, and Cases*. Oxford University Press.
Fri, Oct, 14	**Programming Day!** TOPIC: bivariate relationships	• "Overview of Graph Twoway Plots | Stata Learning Modules." UCLA: Statistical Consulting Group. • "Correlation | Stata Annotated Output." UCLA: Statistical Consulting Group.
Week 8		
Mon, Oct 17	Regression (part 1)	• *Naked Statistics*, chapter 11
Wed, Oct 19	Regression (part 2)	• "Interpreting Regression Output" Princeton University Library.
Fri, Oct 21	**Programming Day!** TOPIC: bivariate regression	• *Statistics and Data Analysis Using Stata*, chapter 12, read through section 12.4 (stop before section 12.5 "multiple regression analysis" • YOUTUBE: "Simple linear regression in Stata®" StataCorp LLC.

Week 9		
Mon, Oct 24	Regression (part 3)	• *Statistics and Data Analysis Using Stata*, chapter 12 • YOUTUBE: "STATA Tutorials: Multiple Linear Regression." Department of Methodology LSE.
Wed, Oct 26	Avoiding Regression Pitfalls	• *Naked Statistics*, chapter 12 • MOODLE: Matthews, Robert. 2000. "Storks deliver babies (p=0.008)." *Teaching Statistics* 22:36-38
Fri, Oct 28	**Programming Day!** TOPIC: multivariate regression	• *Statistics and Data Analysis Using Stata*, chapter 12 • YOUTUBE: "STATA Tutorials: Multiple Linear Regression." Department of Methodology LSE.
Week 10		
Mon, Oct 31	Data Visualization	• Review example posters at: https://urc.ucdavis.edu/photo-galleries/uc-davis-academic-posters
Wed, Nov 2	Survey Methods and Sampling	• *Naked Statistics*, chapter 10 • *Statistics and Data Analysis Using Stata*, chapter 2
Fri, Nov 4	**Programming Day!** TOPIC: egen, merge, and append	• *Data Analysis Using Stata*, chapter 5, section 5.3.4 "Egen" • "Combining Data	Stata Learning Modules." UCLA: Statistical Consulting Group.
Week 11		
Mon, Nov 7	Using Data and Statistics to Predict the Outcome of the 2022 Election	• Silver, Nate. "When We Say 70 percent, It Really Means 70 Percent." *FiveThirtyEight*. • Read the *FiveThirtyEight* election forecast
Wed, Nov 9	Survey Design	• *Statistics and Data Analysis Using Stata*, chapter 3
Fri, Nov 11	**Programming Day!** TOPIC: poster workshop	• No assigned reading. • We will be working on the poster during class

Week 12		
Mon, Nov 14	"Garbage in, Garbage Out"	• *Naked Statistics*, chapter 7
Wed, Nov 16	Interviews and Ethnography	• MOODLE: Johnson, Janet B., H. T. Reynolds, and Jason D. Mycoff. 2015. "Chapter 8: Making Empirical Observations," in *Political Science Research Methods*. CQ Press.
Fri, Nov 18	**Programming Day!** TOPIC: poster workshop	• No assigned reading. • We will be working on the poster during class
Week 13		
Mon, Nov 21	**Programming Day!** TOPIC: poster workshop	• No assigned reading. • We will be working on the poster during class
Wed, Nov 23 Fri, Nov 25	**THANKSGIVING BREAK – NO CLASS**	
Week 14		
Mon, Nov 28	NO CLASS	• No assigned reading. • Finish that poster! You must upload the PDF to the Moodle assignment **by midnight (11:59 PM), no exceptions** • Extra office hours will be held during class time
Wed, Nov 30	Statistical Traps and Deception	• MOODLE: Bergstrom, Carl T and Jevin D. West. 2020. "Chapter 7: Data Visualization," in *Calling Bullshit: The Art of Skepticism in a Data-Driven World*. Random House. • *Optional*: extra credit meme due at midnight
Fri, Dec 2	Doing Science Well	• *Naked Statistics*, conclusion • Singal, Jesse. 2015. "The Case of the Amazing Gay-Marriage Data: How a Graduate Student Reluctantly Uncovered a Huge Scientific Fraud." *The Cut*.
Week 15		
Mon, Dec 5	**Poster Presentation Day!**	• Poster Session from 11:45-1:45 at **Sycamore Glen** • There is no final exam – enjoy your winter break!

Updated September 1, 2022