Revised 1/8/2023

POLS 2000: Methods in Political Science

Spring 2023 ± Monday 4:15-7:00, Tuesday and Thursday 12:45-2:00
Professor Matthew Nanes
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Office Hours: Monday 3:00-4:00

Course Description and Introduction

How do voters hold government accountable? Do democratic governments generate better economic growth? What can be done to reduce police violence?

These questions, like countless others about the world we live in, are best answered with data. This course presents the fundamental tools that social science researchers use to ask and answer ³HPSLULFDO´ TXHVWLRQV PHDQLQJ TXHVWLRQV ZKLFK UHT... You will learn to use the scientific method to create evidence about the way political actors operate and interact with one another. Over the course of the semester, we will develop a basic toolkit that you can use to ask and answer questions that are important to you.

This course will cover qualitative and quantitative methods. Many of the topics we cover ± theory building, accuracy and precision, hypothesis testing, and field research ± transcend any division between the two methods. You will learn to do evidence-based research; evidence comes in many forms.

The class is geared towards undergraduate students. You are not required to have any background in statistics or programming. In fact, the only math you will have to do is basic arithmetic, and you are welcome to use a calculator.

For the portions of the class which involve statLVWLFV ZH ZLOO XVH 6WDWD 7KH software; Stata is one of several programs that is ³JRRG HQRXJK´ for the tasks at hand. I will use examples from Stata in class, and you are expected to turn in assignments completed in Stata.

POLS 2000 has both lecture (3 credit hours) and lab (1 credit hour) components. You must register for and participate in both components with the same instructor.

Course Objectives

By the end of this course, you will:

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A Note on Learning Methods

Empirical (i.e. evidence-based) analysis involves a lot of judgement calls. There is very rarely a single, clear-cut right answer. This can be frustrating because, as a student, you want someone to tell you what the right answer is. Unfortunately, there can be more than one right answer, and varying degrees of right answer. If you can defend your answer convincingly, then you have probably arrived at a right answer.

- All students are required to bring a laptop to each class. If you do not have a laptop you wish to use, the Reinert Center can provide one for you to use during the semester. Please talk to Professor Nanes if you would like to discuss this option.
- You will need to install Stata on the laptop you plan to use in this class. A Stata license will be provided to you free of charge at the beginning of the semester. We will download and install Stata together during class. You do not need to do anything before the semester starts.

Course Outline

* Unless otherwise noted, all homework assignments should be turned in via.Canvas

Date	Topic	Before Class

Tuesday 1/31/23	Case Selection	BDM and Fowler ch.4 (all pages) Pape 2021, "Analysis oi1 203.42isA1 oA1 203.4

Thursday 2/16/23	Distributions and sampling	BDM and Fowler p.94-102, 102-109	Lecture and practice: Distributions; The Normal Distribution; Central Limit Theorem	
Monday 2//23	Distributions and sampling		Lecture: Sampling and Uncertainty Activity: "Dice Activity"	"HW5: Sampling and Distributions" - May work with classmates - Begin during lab Due: Thursday 8:00 am
Tuesday 2/21/23	Distributions and sampling		Practice: Uncertainty from sampling; bias and noise; margin of error and confidence intervals	³ + : (Y D O X D W L Q J & R Q J U H V V I Due: Monday 8:00 am
Thursday 2/23/23	Field Research	Fearon, James and David Laitin, ³ , Q W H J U D W L (Qualitative and Quantitative 0 H W K R G V ´ , (Handbook of Political Methodology.	Lecture and discussion: Interviews, surveys, and other researcher observation	
Monday 2/27/23	Bivariate Relationships	Acock p.123-129, 138-141	Lecture and practice: chai squared, t-test, correlation	³ + : Hypothesis Testing" Due: Thursday 8:00 am
Tuesday 2/28/23	Bivariate Relationships	Acock p.156-174	Practice with chai squared, t-test, and correlation Lecture Omitted variable bias	

Monday 3/27/23	Regression: Applying multivariate regression	Acock p.275-281 https://stats.oarc.ucla.edu/stata/modules/graph8/gen-opts/	Lecture and practice: Interpreting regression results Coding lab: Regression in Stata (running models, interpreting output) Activity: Acock p.219-220 exercises 1, 2, 5, 7 (in clusters)	
Tuesday 3/28/23	Regression: Making regression tables	BDM and Fowler p.211-213 (reading tables) https://stats.oarc.ucla.edu/stata/modules/labeing-data/ https://www.princeton.edu/~otores/Outreg2.pdf	Coding lab: Making regression tables	"HW10: Multivariate Regression" Due: Monday 8:00 am
Thursday 3/30/23	Regression: Categorical predictors Producing and interpreting results	Ackock p.299-304, 308-309 BDM and Fowler p.306-315 (visualizing results)	Group work: Practice interpreting results; understanding confidence intervals	
Monday 4/3/23	Regression: Application to own research		LA: Clusters work on translating their research design into a regression framework	
Tuesday 4/4/23	Intro to science	BDM and Fowler p.113-134	Accumulation of evidence, p-hacking, publication bias	

Anna Kratky is the Title IX Coordinator at Saint Louis University (DuBourg Hall, room 36; annakratky@slu.edu; 314-977-3886). If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 977-3145 / . R U PDNH DQ DQRQ\PRXV UHSRUW WKU Integrity Hotline by calling 1-877-525-5669 or online at http://www.lighthouse-VHUYLFHV FRP VOX 7R YLHZ 6/8¶V SROLFLHV DQG IR following web addresses: https://www.slu.edu/about/safety/sexual-assault-resources/index.php.

Temporary / Supplemental Statement on In-Person Class Attendance and Participation

The health and well-EHLQJ RI 6/8¶V VWXGHQWV VWDII DQG IDFXOW\ DUH FULWLFDO ly, the following University policy statements on in-person class attendance are designed to preserve and advance the collective health and well-being of our institutional constituencies and to create the conditions in which all students have the opportunity to learn and successfully complete the course.

1. Students who exhibit any potential COVID-19 symptoms (those that cannot be attributed to some other medical condition the students are known to have, such as allergies, asthma, etc.) shall absent themselves from any in-person class attendance or in-person participation in any class-related activity until they have been evaluated by a qualified medical official. Students should contact the University Student Health Center for immediate assistance.

2. Students (whether exhibiting any of potential COVID-19 symptoms or not, and regardless of how they feel) who are under either an isolation or quarantine directive issued by a qualified health official must absent themselves from in-person course activities per the stipulations of the isolation or quarantine directive.

3. Students are responsible for notifying their instructor of an absence as far in advance as possible; when advance notification is not possible, students are responsible for notifying each instructor as soon after the absence as possible. Consistent with the University Attendance Policy, students also are responsible for all material covered in class and must work with the instructor to complete any required work. In situations where students must be absent for an extended period of time due to COVID-19 isolation or quarantine, they also must work with their instructor to determine the best way to maintain progress in the course as they are able based on their health situation.

4. Consistent with the University Attendance Policy VWXGHQWV PD\ EH DVNHG WR SURYLGH PHGLFDO GRFXPHQWDWLRQ ability to attend and/or participate in class for an extended period of time.

5. As a temporary amendment to the current University Attendance Policy, all absences due to illness or an isolation/quarantine directive issued by a qualified health official, or due to an adverse reaction to a COVID YDFFLQH VKDOO EH FRQVLGHUHG ³$XWKRUL]HG´ DEVHQFHV