POLS 2000
Methods in Political Science
Fall 2022(Section: 2000-04)
Monday-Wednesday-Friday: 11:00-11:50

Dr. Post Basnet
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Office Hours: Monday 1-4 p.m.
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Class: McGannon Computer Lab #118

Course Description

This course has been designed to introduce students to the scientific research process in political science. We will begin with the logic of social scientific inquiry and the basics of research design, and then move on to the qualitative and quantitative methods that are commonly used by political scientists to answer important political questions. Students will learn how to examine data, interpret results, and conduct research. Throughout the course, students will use STATA, a widely used statistical software package in social sciences. We will discuss how to formulate theoretical arguments, build hypotheses, and find ways to test them. The course will prepare students for more advanced coursework in social sciences, for starting their own research, and for a life as an informed citizen. Students are expected to finish the assigned readings before the class begins, attend classes regularly, and participate actively in class discussions.

Requirements and Evaluation

1. **Homework Assignments**: There will be 9 homework assignments, each of which will be posted on Canvas one week before the due date. I will drop your lowest homework grade. So, you will be okay even if you complete only eight homework assignments. Homework assignments will be worth 20% of the total course grade. Students can discuss homework assignments with their classmates, but all final work must be their own.

2. **Exams**: There will be two exams that will have a wide variety of material covered in this course, including some multiple choice and some short answer (some requiring interpretation of results and others requiring calculations). The final will be cumulative for the entire course. The mid-term exam will be worth 15% and the final will be worth 20% of your final grade.

3. **Research Design**: Students are expected to complete several assignments that will culminate in a research design. It will be worth 30% of your final grade. It is different

Value Statement 5%

Mid-term Exam 15%
Final Exam 20%

Your final grades will be assigned that correspond to the following numeric scale:

A	93-100	B+	87-89	C+	77-79	D	60-70
A-	90-92	B	83-86	C	73-76	F	below 60
		B-	80-82	C-	70-72		

Required Texts:
The required textbook is available for purchase at the Saint Louis University Bookstore in the Busch Student Center. The additional readings that are not in the textbooks will be made available via Canvas.

Philip H. Pollock III and Barry C. Edwards. 2019. *The Essentials of Political Analysis*, 6th ed. Sage/CQ Press. ISBN 978-1-5063-7961-6.
Powner, L. C. (2014).

Students with a documented disability who wish to request academic accommodations must formally register their disability with the University. Once successfully registered, students also must notify their course instructor that they wish to use their approved accommodations in the course.

Please contact the Center for Accessibility and Disability Resources (CADR) to schedule an appointment to discuss accommodation requests and eligibility requirements. Most students on the St. Louis campus will contact CADR, located in the Student Success Center and available by email at accessibility_disability@slu.edu or by phone at 314.977.3484. Once approved, modations will be shared with

to crafting strong sentences and documenting sources. For more information, visit https://www.slu.edu/life-at-slu/student-success-center/ or call the Student Success Center at 314-977-3484.

Basic Needs Security:

Students in personal or academic distress and/or who may be specifically experiencing challenges such as securing food or difficulty navigating campus resources, and who believe this may affect their performance in the course, are encouraged to contact the Dean of Students Office (deanofstudents@slu.edu or 314-977-9378) for support. Furthermore, please notify the instructor if you are comfortable in doing so, as this will enable them to assist you with finding the resources you may need.

Class Schedule and Readings:

Week 1: Overview of the Course
(Aug 24-26)

Wednesday:

Friday:
Your research question:
Powner: chapter 1(From Research Topic to Research Question, pp. 1-12)

Lab#1 (4:15-7 p.m., Wednesday)

Week 2: The Scientific Approach to Knowledge

(Aug 29 to Sept 2)

Topic: This topic will introduce students to the scientific study of politics. We will discuss how the scientific approach differs from other approaches, and how it works in political science. We will discuss how to review literature and the roles of theories and hypotheses in the research process. Students are expected to understand the primary goals of political science and how these goals are achieved.

Monday: The scientific approach to knowledge

   --John Allen Paulos (1995), *A Mathematician Reads the Newspaper*, pp. 151-153 (FDA
      Caught between Opposing Protesters: Statistical Tests and Confidence Intervals)

   --Pollock & Edwards: Introduction (pp. xxi-xxvi), chapter 10 (Picking a Good Topic Getting
      Focused and Staying Motivated, an

<u>Wednesday: Literature Review</u>

--Pollock & Edwards: chapter 10 (Reviewing Prior Literature section only; pp. 319-321)

<u>Friday: Theories and Hypotheses</u>
--Pollock & Edwards: chapter 3 (Introduction through Common Mistakes in Hypothesis Writing
    section; pp. 72-85)
--Powner: chapter 2, (From Question to Theory. pp: 28-41)
-- Pollock & Edwards: chapter 10 (Writing It Up section only; pp. 327-330)

Lab #2 (4:15-7 p.m., Wednesday)

Week 3: Research Design and Causality

(Sept 5-9)

Topic: We will discuss how political science research imitates as well as differs from research in the natural sciences. We will discuss how experimental designs work in the natural sciences and the limitations of this approach in political science. We will also see the difference between correlation and causation and some strategies to help overcome these problems.

<u>Monday: Labor Day. No Class</u>

<u>Wednesday: Experiments in Political Science</u>

   --Pollock & Edwards: chapter 4 (Research Design, Research Ethics, and Evidence of Causation)

Homework Assignment 1 Due

<u>Friday</u>: Stephen Ansolabehere, Shanto Iyengar, Adam Simon, and Nicholas Valentino (1994).
    "Does Attack Advertising Demobilize the Electorate?" *American Political Science Review*
    88, 4 (December): 829-838.

Lab #3 (4:15-7 p.m., Wednesday)

Week 4: Research Design an

(Sept 12-16)

Topic: Even if true experimental designs are difficult in political science, we can still learn from these designs to achieve our goals.   -
experimental design and Ishi
comparative case studies. We will discuss if they have achieved what they claim.

<u>Monday: Quasi-experiments</u>

--Pollock & Edwards: chapter 5 (Making Controlled Comparisons)

Wednesday: Quasi-experiments
--Donald T. Campbell and H. Laurence Ross (1968). "The Connecticut Crackdown on Speeding: Time-Series Data in Quasi-Experimental Analysis." Law and Society Review 3, 1: 33-54.

Friday: Statistical control, Case Studies, and Comparative Method

--   Politics and the Comparative M   *American political science review*, *65*(3), 682-693.
-- John T. Ishiyama (1993). "Founding Elections and the Development of Transitional Parties: The Cases of Estonia and Latvia, 1990-1992." Communist and Post-Communist Studies 26, 3 (September): 277-299.
          Homework Assignment 2 Due

Lab #4 (4:15-7 p.m., Wednesday)

Week 5: Concepts, Variables, and Measurement

(Sept 19-23)

Topic: We will discuss the differences between concepts, variables, and indicators. We will then consider measurement error and issues related to reliability and validity. We will explore how political scientists get their data and discuss the benefits and drawbacks of using existing data sets as well as collecting your own data.

Monday: Concepts and variables

--Pollock & Edwards: chapter 1 (The Definition and Measurement of Concepts)

Wednesday: Datasets / data collection
-- Pollock & Edwards: chapter 10 (Collecting Data section only, pp. 321-327)

Friday: Data

--Powner: chapter 6 (Qualitative Data Collection and Management, pp 144-155)
          Homework Assignment 3 Due

Lab #5 (4:15-7 p.m., Wednesday)

Week 6: Descriptive Statistics
(Sept 26- Sept 30)

Topic: We will now focus on specific methods and techniques that we use in political science. We will discuss the use of descriptive statistics to summarize data, beginning with bar, pie graphs/charts, and histograms. We will then discuss the measures of central tendency (mean, median, and mode) and measures of dispersion (such as standard deviation). These techniques are important for a basic understanding of any variable.

Monday: Intro to descriptive statistics

--Pollock & Edwards: chapter 2 (Measuring and Describing Variables)

Wednesday: No Class, Fall Break

Friday: Chapter 3 -

--Pollock & Edwards: chapter 7 (Introduction and Statistical Significance and Null Hypothesis Testing section only, pp. 199-201)

Wednesday: Significance, cont d
　　　　　Homework Assignment 5 Due

Friday: Wednesday: Significance, cont d

 Lab #8 (4:15-7 p.m., Wednesday)

Week 9: Review and mid-term exam
(Oct 17- Oct 21)

Monday: Review
Wednesday: Exam

Friday: Review and Hypothesis Testing

Week 10: Hypothesis Testing: Categorical Variables
(Oct 24 to Oct 26)

Topic: We will discuss the use of statistical significance for hypothesis testing about categorical (nominal or ordinal) variables. We will explore crosstabulation and Chi-square (X2) tests, which are used to examine the significance of the relationship between variables.

Monday: Crosstabs and X2 tests
--Pollock & Edwards: chapter 3 (Cross-tabulations section; pp. 86-89), chapter 7 (The Chi-Square Test section, pp. 215-222)

Wednesday: Nominal/ordinal-level variables (Phi, V)
   --Pollock & Edwards: chapter 7 (Measures of Association pp. 222-232)

　　　Homework Assignment 6 Due

Friday: No Class, Fall Break

Lab#9 (4:15-7 p.m., Wednesday

Week 11: Hypothesis Testing: Continuous/Interval Variables
(October 31- November4)

Topic: We will examine how we test hypotheses about continuous or interval level variables. First, we will discuss the ways to examine the difference of means between two samples and then examine analysis of variance (ANOVA), which is used to compare the means across more than two groups.

--Pollock & Edwards: chapter 7 (One-Sample Significance Tests and Two-Sample Significance Tests sections, pp. 201-215)

Difference in means tests cont
Homework Assignment 7 Due

Friday: Analysis of variance (ANOVA)

Lab #10 (4:15-7 p.m., Wednesday)

Week 12: Correlation and Regression
(November 7-11)

Topic: We will focus on the associations between one independent variable and one dependent variable. This will cover the interpretation of bivariate regression and such matters as significance testing and assessing model fit.

--Pollock & Edwards: chapter 8 (Introduction and Correlation section only, pp. 239-244)

Wednesday: Bivariate regression
--Pollock & Edwards: chapter 8 (Bivariate Regression through R-Square sections only, pp. 244-257)
Homework Assignment 8 Due

Friday: Bivariate regression

Lab #11 (4:15-7 p.m., Wednesday)

Week 13: Regression Cont'd
(November 14-18)

Topic: We will consider multiple regression analysis and some extensions such as the use of

Homework Assignment 9 Due

Friday: Logistic regression

Lab #12 (4:15-7 p.m., Wednesday)

Week 14: Wrapping up
(No 21-25)

Monday: Powner: chapter 11 (Posters, Presentations, and Publishing)

Wednesday: Thanksgiving, No Class

Friday: Thanksgiving, No Class

Week 15: Presentation
(Nov 28-Dec 2)