

Political Science 280: Introduction to Political Analysis

Monday and Wednesday, 4:30 - 5:45pm

Social Sciences 2069

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Office Hours: Monday and Wednesday, 3:30 - 4:30pm

Course Description

In this course we will explore various approaches to political research. You will learn how to think critically about political research, and how to conduct your own. For the first portion of the course, you will learn how to construct research questions, theories, and hypotheses with a scientific eye. This portion will conclude with an introduction to the quantitative and qualitative analysis of hypotheses. The second portion of the course emphasizes statistics and the application of quantitative analysis to political phenomenon. By the end of the course you should be able to evaluate empirical arguments as well as construct and test your own.

Learning Objectives

- To demonstrate an ability to think about political research critically, both in terms of theory and analysis.
- To communicate existing and self-created political research effectively.
- To demonstrate a clear understanding of the scientific method and its application in the political and social sciences.
- To understand and apply quality research design.
- To understand and apply basic quantitative methods of analysis.
- To demonstrate the ability to organize and analyze data using a widely-used statistical software, R.

Required Materials

- Shively, W.P., 2017. *The Craft of Political Research*. 10th ed. Taylor & Francis.
9th Edition will work, but will have different page numbers than those assigned.
- Any additional required readings will be available on Learn, will be marked accordingly and listed on the Course schedule.
- This course will use the open source statistical computing software R. R is a free software held under a general public license. (www.r-project.org) RStudio will be the specific program used (<https://www.rstudio.com>), and can be installed on your personal computer, an HTML browser-based version can also be used (<https://rstudio.cloud>), or you can use a computer in the lab adjacent to our classroom.

Recommended Materials

- Imai, Kosuke, 2017. *Quantitative Social Science: An Introduction*. Princeton University Press.

Course Requirements

- 10% Participation, Readings, and Current Events with Stats
 - Course attendance is mandatory. To be present means to have completed the assigned readings for the week and to be able to discuss them with the class. In addition, all students are expected to follow the news daily and to bring to class examples of statistics used well/poorly in the media. Simply showing up without preparing is not “participating.” You may miss one class without penalty; every class missed thereafter will result in a 2/3 letter grade reduction in your participation grade. If an emergency arises which will lead to missed class(es), please contact me as soon as possible so we can arrange accordingly.
- 50% Homework Assignments
 - There are 10 homework assignments spread throughout the semester. Each assignment is very important as they are cumulative in knowledge; missing one may set you back significantly. Each assignment should take around one hour to complete.
- 15% Midterm Exam (March 5/6)
 - Your midterm exam will assess your understanding of assigned readings, material presented in lecture, and topics discussed in class to date. The midterm will be a 24-hour take home exam and will consist mostly of multiple choice and short answer responses. The exam will be available to download at 3:00 pm on Tuesday 3/5 and is due no later than Wednesday 3/6 at 3:00 pm.
- 25% Final Project
 - The final assignment for this class will be a cumulative project that incorporates all topics covered to-date into a larger research project that aims to answer an original research question of your own design. This is where you get to stretch your legs a little and think about something that is truly interesting to you and how you might go about researching and measuring it given the resources we have available. You will be responsible for (a) writing up your findings in final report as well as (b) presenting your findings to the class.

Accommodation of Disabilities

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor’s attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 for additional information.

If you need an accommodation based on how course requirement interact with the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment we can discuss the course format and requirements, anticipate the need for adjustments and explore potential accommodations. I rely on the Disability Services Office for assistance in developing strategies and verifying accommodation needs. If you have not previously contacted them I encourage you to do so.

Computer Lab Policies

Always consult the Political Science Computer Lab schedule posted on the door before planning to use the lab independent of our regular class time. Other classes have scheduled time in the lab.

The Lab closes at 5:00 PM. No food or drinks are allowed in the Lab. The Political Science Computer lab is supported by departmental funds and is to be used for POLS 280 printing/purposes only.

Course Schedule

Week 1

- Monday, January 14th
 - Course Introduction and Syllabus
- Wednesday, January 16th
 - Intro to Political Analysis
 - *Reading*: Shively Ch. 1

Week 2

- Monday, January 21st
 - **NO CLASS - MARTIN LUTHER KING DAY**
- Wednesday, January 23rd
 - The Scientific Method

Week 3

- Monday, January 28th
 - Theory and Research Questions
 - *Reading*: Shively Ch. 2
- Wednesday, January 30th
 - Evaluating Causal Relationships
 - *Reading*: Shively Ch. 3
 - *Homework 1 Due*

Week 4

- Monday, February 4th
 - Research Design
 - *Reading*: Shively pp. 78 - 81
- Wednesday, February 6th
 - Research Design (cont.)
 - *Homework 2 Due*

Week 5

- Monday, February 11th
 - Qualitative and Quantitative Approaches
 - *Reading*: Shively pp. 81 - 100
- Wednesday, February 13th
 - What is Data?

- *Reading*: Shively Ch. 4

Week 6

- Monday, February 18th
 - Data and Measurement
 - *Reading*: Shively Ch. 5
- Wednesday, February 20th
 - Data and Measurement (cont.)
 - *Reading*: Shively Ch. 7
 - *Homework 3 Due*

Week 7

- Monday, February 25th
 - Probability and Statistical Inference
 - *Reading*: Kellstedt and Whitten - Descriptive Statistics
- Wednesday, February 27th
 - Probability and Statistical Inference (cont.)
 - *Homework 4 Due*

Week 8

- Monday, March 4th
 - Bivariate Hypothesis Testing
- Wednesday, March 6th
 - **MIDTERM DUE – 3:00pm**
 - Bivariate Regression Models

Week 9

- **SPRING BREAK - NO CLASS**

Week 10

- Monday, March 18th
 - Intro to R
 - *Reading*: Imai - Introduction to R
- Wednesday, March 20th
 - Lab: Data Management and Transformation

Week 11

- Monday, March 25th
 - Lab: Bivariate Hypothesis Testing
 - *Homework 4 Due*
 - *Recommended Reading:* Imai pp. 80 - 88
- Wednesday, March 27th
 - Lab: Bivariate Regression Models
 - *Homework 5 Due*
 - *Recommended Reading:* Imai pp. 97 - 107

Week 12

- Monday, April 1st
 - Multiple Regression
 - *Homework 6 Due*
 - *Reading:* Higgins - Intro to Multiple Regression
- Wednesday, April 3rd
 - Lab: Multiple Regression
 - *Homework 7 Due*
 - *Recommended Reading:* pp. 165 - 176

Week 13

- Monday, April 8th
 - Limited Dependent Variables
 - *Homework 8 Due*
- Wednesday, April 10th
 - Lab: Logistic Regression

Week 14

- Monday, April 15th
 - Final Project Workshop
 - *Homework 9 Due*
- Wednesday, April 17th
 - Final Project Workshop

Week 15

- Monday, April 22nd
 - Final Project Analysis
 - *Homework 10 Due*
- Wednesday, April 24th
 - Final Project Analysis

Week 16

- Monday, April 29th
 - Final Project Analysis
- Wednesday, May 1st
 - Final Project Analysis

Week 17

- Monday, May 6th
 - **FINAL PROJECT DUE - 4:30pm**