

# SOSC 13200/1: Social Science Inquiry II (Winter 2022)

Meeting Time: Tue & Thu 9:30-10:50 AM

Location: Wieboldt Hall 310C

Instructor: Dr. Shu Fu, [fushu@uchicago.edu](mailto:fushu@uchicago.edu)

Office: Pick Hall 503

Office hours: Mon 3:30-5:00 PM or by appointment

## COURSE OBJECTIVES

This course is an introduction to the use of quantitative data to explore social scientific theories. You will learn how to approach a social scientific claim, conceptualize it, measure it by data, and evaluate the data. The goal of this course is to increase your level of understanding of the most common statistical concepts and to work on statistical software programming and data visualization.

To guide this introduction, the course will focus on one of the most vivid and important literature of social science: *The American Voter*. We will do so by spending most of the quarter looking at a particular claim related to this question: *What affects individual vote choice and why did Joe Biden win in the 2020 presidential election?*

By the end of the course, you will 1) grasp statistical concepts, 2) be able to do some programming and analyze social science phenomena with empirical data, and 3) better understand the American presidential elections.

## COURSE ORGANIZATION

The class meets twice per week for 1 hour and 20 mins each. The course will progress in **weekly** pace. On each week, class sessions will be one of three types:

- **Discussion**, where I guide the class – divided into small groups – through a conceptual discussion about that week's topic;
- **Demonstration**, where I use R to perform a task related to that week's topic;
- **Lab**, where I guide the students through using R themselves to perform a task related to that weeks' topic.

## COURSE REQUIREMENTS

### Attendance and Class Preparation:

Students are expected to come to every class and to participate in class activities. You should read the assigned reading(s) for a particular class day prior to coming to class. *If you attend class and do your work responsibly, then you will do well in this class.*

## Readings:

All required readings are available on the course Canvas page. Readings will be a combination of academic journal articles, statistics textbooks, programming guidance, and blog posts.

Furthermore, you might also find helpful the following resources. These readings are not required, but are rather additional resources for further learning.

- *Introductory Statistics with R*, by Peter Dalgaard, which is available electronically through the library, or on Canvas.
- *R for Data Science* by Hadley Wickham and Garrett Grolemund, which is in open access at <https://r4ds.had.co.nz/>.
- *ggplot2: Elegant Graphics for Data Analysis*, by Hadley Wickham, which is available at <https://ggplot2-book.org/index.html>.

## Software, Computer Use, and Datasets:

For this class we will be using **R**. **R** is a programming language that is especially powerful for data exploration, visualization, and statistical analysis. To download **R**, go to CRAN (the Comprehensive R Archive Network) at this site, <https://cran.r-project.org/>.

To interact with **R**, we use RStudio. Please install the latest desktop version of RStudio. You can download the latest version of RStudio at this site, <https://rstudio.com/products/rstudio/download/>.

The datasets we will be using in the class or their links can be all found on Canvas.

## **ASSIGNMENTS**

The main assessment in the class will be your performance on seven weekly assignments. These assignments will be given on Thursday and be due on **the following Monday**. Assignments are due on Canvas before **7 PM** the day they are due. Late submissions will be penalized.

I have a **15 minute rule** for this class.<sup>1</sup> If you encounter a problem in your assignments, spend 15 minutes troubleshooting the problem on your own. Make use of Google and StackOverflow to resolve the error. However, if after 15 minutes you still cannot solve the problem, ask for help.

## **GRADING**

Your final course grade will be figured according to the following proportion

<b>Attendance/Class Participation:</b>	<b>10%</b>
<b>Homework Assignments:</b>	<b>70%</b>
<b>Final Paper (details to TBA):</b>	<b>20%</b>

## COURSE OUTLINE

### Week 1 & Week 2: Introduction & Vote Choice Theory (VIRTUAL)

#### Zoom link accessed on Canvas

Tue (Jan 11): *Course overview*

Thu (Jan 13): *Theory of Vote Choice – The Fundamentals*

- William G. Jacoby. 2010. “The American Voter.” In *The Oxford Handbook of American Elections and Political Behavior*, edited by Jan E. Leighley, 262-277. Oxford University Press.

Tue (Jan 18): *Programming 101 – Getting to know R*

Thu (Jan 20): No Class (packing and traveling back to Hyde Park)

#### Assignment 1: Practice and Produce a Word/PDF by RMarkdown

### Week 3: Conceptualizing and Measuring

Tue (Jan 25) & Thu (Jan 27): *Measuring Vote Choice by American National Election Studies (ANES)*

- Donald Green, Bradley Palmquist, and Eric Schickler. 2002. *Partisan Hearts & Minds: Political Parties and the Social Identities of Voters*. Yale University Press. Chapter 2.
- Stephen Ansolabehere, Jonathan Rodden and James M. Snyder Jr. 2006. “Purple America.” *Journal of Economic Perspectives* 20(2): 97-118.

#### Assignment 2: ANES Data Loading and Variable Recoding

### Week 4: Observing

Tue (Feb 1) & Thu (Feb 3): *Seeing a “there” by Observing Patterns; Visualization*

#### Assignment 3: Plotting Vote Choice

### Week 5: Analyzing

Tue (Feb 8) & Thu (Feb 10): *See a “there, there”. Sampling and Statistical Inference. Hypothesis Testing, T-tests and P-values*

- Donald R. Kinder and D. Roderick Kiewiet. 1981. “Sociotropic Politics: The American Case.” *British Journal of Political Science* 11(2): 129-161.

#### Assignment 4: Basic Analysis of Vote Choice

## **Week 6: Complicating**

Tue (Feb 15) & Thu (Feb 17): *Threats to Inference; Bringing in new/ control variables; Conditional T-tests*

### **Assignment 5: Adding and Evaluating Control Variables**

## **Week 7: Regressing**

Tue (Feb 22) & Thu (Feb 24): *OLS Regression; Bivariate Regression and multivariate Regression*

### **Assignment 6: Regression Analysis I**

## **Week 8: (More) Regressing**

Tue (Mar 1) & Thu (Mar 3): *Regressing with a binary outcome – Linear Probability Model and Logit Model*

### **Assignment 7: Regression Analysis II**

## **Week 9: Past, Present, and Future**

Tue (Mar 8): *Extension and further inquiry on American Vote Theory*

- Anthony Fowler. 2020. “Partisan Intoxication or Policy Voting?” *Quarterly Journal of Political Science* 15(2): 141-179.
- Andrew Healy and Gabriel S. Lenz. 2014. “Substituting the End for the Whole: Why Voters Respond Primarily to the Election-Year Economy.” *American Journal of Political Science* 58(1): 31-47.
- Gabriel S. Lenz. 2009. “Learning and Opinion Change, Not Priming: Reconsidering the Priming Hypothesis.” *American Journal of Political Science* 53(4): 821-837.
- Donald R. Kinder and Alison Dale-Riddle. 2012. *The End of Race? Obama, 2008, and Racial Politics in America*. New Haven: Yale University Press.
- Anthony Fowler. 2016. “Football games, shark attacks, and why voters may not be so incompetent after all.”

Thu (Mar 10): *Replicating Pager (2003) and Card and Krueger (1994)*.

### **Final Paper: TBA**