

## **POLI 7000-001: Research Methods for Public and Nonprofit Organizations**

Spring 2021 | M 6:30 PM - 9:00 PM | Haley 3195

Instructor:	Soren Jordan	Email:	scj0014@auburn.edu
Office:	Haley 8024	Phone:	334.844.6265
Office Hours:	Zoom ID: 7720942787: TR 9:00 - 10:00 AM; Or by appointment (email me)		
TA:	Noemi Oeding	Email:	nzo0008@auburn.edu

### **Overview, Objectives, and Outcomes**

All of our knowledge of the social world is quite literally *produced*. One way of producing this knowledge is systematically collecting scored observations about the world around us and using those scores to derive conclusions about patterns. To do this requires knowledge of both specific methods, as well as a background in a probabilistic way of thinking about the world. We'll develop both in this class.

In particular, we'll focus on building these skills of research design, methods, and analysis in the context of the professional environment of your MPA degree. You'll often be asked to generate conclusions and make recommendations on the basis of data; moreover, you'll be asked to make those recommendations in plain, clear language that is familiar to colleagues and employers.

#### Student Learning Outcomes:

1. Students will be able to identify independent and dependent variables.
2. Students will be able to generate basic datasets to answer causal questions.
3. Students will be able to solve basic conditional probability problems.
4. Students will be able to describe and implement basic dataset structure and operations.
5. Students will be able to describe and execute classic frequentist statistical significance tests.
6. Students will be able to execute, interpret, and diagnose OLS.

Official catalog description: Research Methods for Public and Nonprofit Organizations. (3). LEC.  
3. Statistics and other quantitative techniques for the analysis of policy and for administrative decision making.

### **Prerequisites**

Graduate classification.

## COVID

*Attendance:* This class is being offered *in person, as per Auburn's mandate*. On lecture days and at the scheduled time, class will meet in-person. You will need to attend class in-person. You must adhere to the following guidelines.

Six-foot bubble. As per University guidelines, you'll stay six feet apart for everyone's comfort and safety while we're indoors. That includes social distancing from me, unfortunately. It's not personal; it's just COVID. There will be no in-office meetings this semester; I will be available during office hours over Zoom.

Masks. Everyone in Haley will wear a mask that **covers your nose and mouth** at all times while indoors. **I will not provide masks.** Masks are required when you're indoors, no exceptions. Your vaccination status does not matter.

The only exception is if you have cleared, with me, beforehand, an exemption to take class remotely. Even then, your attendance must still be synchronous: there will be no recorded lectures, and you must attend lecture virtually at the scheduled class time. You must also come prepared to interact with class.

*Office Hours:* Haley is super old with approximately no air circulation in my office. As such, face-to-face meetings in closed quarters in my office are a bad idea, and I do not plan to be in my office this semester. One of my chief regrets this semester is that I won't be in the office to have conversations with all of you through the week. I mean this very sincerely: for graduate students I have an open-door policy, but that door will have to be virtual this semester. Instead, I will have a Zoom room open (ID: 7720942787) on Tuesday and Thursday from 9 AM to 10 AM. If you need to meet outside of this time, please email me to schedule a meeting. You are still very much encouraged to meet with me if you have questions about the course, graduate school more broadly, and so on.

### *Contingency plans:*

If I get sick. Another instructor will continue to deliver lecture as scheduled in the syllabus, or I will continue to deliver materials (but exclusively online).

If the University moves to completely online at any point. Class will continue to be delivered online synchronously at the scheduled days and times.

If you get sick or must quarantine. Attend the class via Zoom. Let me know if this is not feasible. *If you miss a class meeting or assignment due to illness, let me know as soon as possible and **be prepared to document your absence**.* A University-approved and documented absence will be required to make up any assignment or exam.

## Expectations

Graduate courses, especially graduate courses for research design and methods, are intended to lay the foundation for your future as a researcher. Each one of you have elected to be here and to pursue a graduate degree, so it is to your benefit to attend class, do the outside readings, complete the homework assignments, and, most importantly, *come to class prepared to discuss the material*. Graduate courses are built around an exchange of ideas, so come prepared with your ideas! I refuse to enable anyone to actively seek out a “C” grade in this class, and if you plagiarize any portion of any assignment (including plagiarizing a fellow student’s answers), it’s an automatic zero.

I also expect that you make a reasonable effort to maintain classroom decorum by refraining from reading newspapers, doing crossword puzzles, sleeping, texting, or playing on Facebook (or whatever social network/game/trend that I’m oblivious to). Please silence all cell phones. These ideas are formally outlined in the Auburn University Classroom Behavior policy: see [tinyurl.com/au-st-pol](http://tinyurl.com/au-st-pol) for more details. Consistent with Auburn University policy, I encourage class attendance from all students.

## Text

There is one required book for this class.

Kellstedt, Paul M. and Guy D. Whitten. 2018. *The Fundamentals of Political Science Research: Third Edition*. Cambridge: Cambridge University Press. ISBN: 978-1-316-64267-2

Econometrics books are reference texts that you’ll revisit for the life of your career, so I recommend owning your own copy of the book. The other texts are articles available from the Auburn University Library. I will not post the articles to **Canvas** unless the library doesn’t provide access; learning how to acquire the full text of an article is an essential skill in graduate school. I included the DOI of every article: it will point you to the article’s website if you “resolve” it at [www.doi.org](http://www.doi.org). All of the articles are ungated if you access them on Auburn’s Wifi network. If you’re at home, you can still get the full text by logging into the library and searching for the journal. If you cannot find one of the articles, let me know, and I’ll make it available on **Canvas** or email.

You must obtain a copy of R (available from <https://cran.revolutionanalytics.com/>). You will probably hate, then maybe learn to love, using R. We will use it because it is (a) free and (b) flexible enough to test most theories of political science. That means you are guaranteed to be able to use it in your professional career, since it’s free to obtain and use. You’re free to use another analysis software if you like. I’ll devote minimal in-class time to answering questions in other software programs. Full disclosure: the only other software I even have on my computer is **Stata**, so it will be difficult for me to answer in-class questions on **SAS**, **SPSS**, or any other program. We will devote an extensive amount of class time to learning to use R effectively.

## Assignments

The course is divided into the following components:

Class participation	50 points
Writing assignment 1	50 points
Writing assignment 2	100 points
Writing assignment 3	150 points
Writing assignment 4	250 points
Midterm	100 points
Final	150 points
<hr/> Total	<hr/> 850 points

In order, those components are ...

**Class participation:** Do. The. Reading. It is literally that simple. Do the reading and come to class prepared to discuss that reading. I know it can feel weird to read a chapter of a methods textbook, but try to read for ideas instead of for statistical content. When I ask questions of the class, please answer the questions and contribute to the lecture. When you have questions, please ask them. Also, be prepared to be randomly called on to answer questions during lectures.

**Writing assignments:** There will be four writing assignments throughout the semester. You'll be asked to use **R** plus a variety of political science data to practice using statistics to come to empirical conclusions. These four writing assignments will cover four different areas of public administration. The deliverables will become progressively more statistically demanding and professionally comprehensive. Each assignment will be outlined separately on **Canvas** as their assignment dates approach.

You're also reminded that a core part of successfully completing the MPA program is an ePortfolio ([aub.ie/mpa-eportfolio](http://aub.ie/mpa-eportfolio)). The MPA Program supports the Auburn University ePortfolio initiative, and is an active member of the ePortfolio Project Cohort. As a result, MPA students are required to develop an ePortfolio that 1) demonstrates their proficiency in each of the five MPA program core competencies, 2) articulates their own personal public service philosophy, and 3) identifies their professional goals and incorporates examples of learning, classwork and/or experience that illustrates progression toward those goals. You are encouraged to consider how your experience in this class relates to your professional goals and how your work in the course might be included in your ePortfolio.

The writing deliverables in this course make *excellent* artifacts for the ePortfolio. Artifacts are meant to be representations of the core competencies of the MPA program. This course is especially adept at "demonstrate the ability to analyze, synthesize, think critically, solve problems, and make decisions." If you're interested in using one of the writing assignments as an artifact, remember that it must be introduced by self-reflection (outlined in the ePortfolio roadmap at [aub.ie/mpa-eportfolio](http://aub.ie/mpa-eportfolio)). If you'd like feedback on self-reflection, submit it alongside your assignment and I am happy to provide extra (ungraded) feedback on your reflection.

**Midterm examination:** this will be a take-home exam on March 8. We will not have class this week. We will discuss midterm exam details as the date approaches.

**Final examination:** this will be a take-home exam on April 26. We will discuss final exam details as the date approaches.

### Makeups and Grades

Makeup assignments/examinations will only be offered to those with a University excused absence, which can be found at [tinyurl.com/au-st-po1](http://tinyurl.com/au-st-po1). It is your responsibility to ensure that your absence is covered by the University, and it is your responsibility to comply with all policies. These policies require that you notify me of your absence prior to the date of absence if such notification is feasible, but within one week from the missed class. Your makeup examination must be scheduled within two weeks of this notification (though I recommend much, much earlier). If I need additional information on your absence (doctor's notes, for instance), you must provide this additional documentation within one week of the last date of the absence. Note that this policy also allows for makeup examinations for reasons deemed appropriate by the instructor. If you do not have a University excused absence, and you are going to miss an examination, it is much easier for me to work with you if you notify me promptly, especially if you can provide some sort of documentation.

89.5-100:	A
79.5-89.49:	B
69.5-79.49:	C
59.5-69.49:	D
59.49↓:	F

I use the standard Auburn University grading scale. To maintain fairness, I do not change grades under any circumstances except when I make a mathematical error in computing your grade. There is no extra credit. All grades will be posted to **Canvas**.

### Contacting Me

I'm in Haley every day, but especially during my listed office hours. I check my email very, very regularly. If you want to get in touch with me through email, I ask that follow three guidelines when attempting to contact me. First: include the course number and section number [8010-001] in the subject of your email. Your email will almost certainly get lost in the abyss if it missing this information. Second: wait at least 48 hours, not including weekends, to send a second email. I promise I will get to it, but it may not be immediate. Third: email me only from your Auburn University official email address. In the event that I need to contact you, it will almost certainly be at your [@auburn.edu](mailto:@auburn.edu) email address. You should check this email often!

### Student Academic Honesty

Auburn University is a institution committed to integrity and honor. It is your job as a University citizen to uphold those values. I will not tolerate any cheating or plagiarism, broadly defined as using unauthorized aids during examinations or attempting to represent someone else's work as your own. You are not as sly as you think you are. With hundreds of heads facing forward, it is

extremely easy to tell who is working alone and who is not. Be aware that academic dishonesty can lead directly to failing the course and being referred to the Academic Honesty Committee. Penalties include expulsion from Auburn, as per Chapter 1202 of Title XII. For additional information visit [tinyurl.com/au-st-pol](http://tinyurl.com/au-st-pol).

### **Emergency Contingency**

If normal class is disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

### **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please electronically submit your approved accommodations through AU Access and make an individual appointment with me during the first week of classes (or as soon as possible if accommodations are needed immediately). If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

Any requests or arrangements made with the instructor in person must be followed up with an official email request for documentation. If you believe you may need an accommodation, it is your responsibility to secure it before the first exam.

### **Copyrighted Materials**

The lectures, presentations (including slides), readings, and exams for this course are copyrighted, so you do not have the right to copy and distribute them. This includes recording class lectures.

### **Course Outline**

Week 1 (January 11): Day 0 Vocabulary; Introduction to R

- Kellstedt and Whitten, Chapter 1

Week 1.5 (January 18): No Class: MLK Day

Week 2 (January 25): Theories, Hypotheses, and Causality

- Druckman, James N. and Richard M. Shafraneck. 2020. "The Intersection of Racial and Partisan Discrimination: Evidence from a Correspondence Study of Four-Year Colleges." *The Journal of Politics* 82(4): 1602-1606. DOI: 10.1086/708776

– Shows clear, concise, directional hypotheses

- Fraga, Bernard L., Eric Gonzalez Juenke, and Paru Shah. 2020. “One Run Leads to Another: Minority Incumbents and the Emergence of Lower Ticket Minority Candidates.” *The Journal of Politics* 82(2): 771-775. DOI: 10.1086/706599
  - What were some of the  $Z$  variables that were threats to causality?
- Kellstedt and Whitten, Chapters 2 and 3

Week 3 (February 1): Case Selection, Measurement, and Basic Data Management in R

- Dassonneville, Ruth, Mary K. Nugent, Marc Hooghe, and Richard Lau. 2020. “Do Women Vote Less Correctly? The Effect of Gender on Ideological Proximity Voting and Correct Voting.” *The Journal of Politics* 82(3): 1156-1160. DOI: 10.1086/707525
  - What does it mean to “vote correctly”? How is it measured here?
- Kellstedt and Whitten, Chapters 4-6

Week 4 (February 8): R and Data Visualization

Week 5 (February 15): Bivariate Statistics, the Frequentist Approach, and the Ideas of Inference and Testing

- Kellstedt and Whitten, Chapters 6-8
- The Central Limit Theorem. [https://www.usablestats.com/lessons/central\\_limit](https://www.usablestats.com/lessons/central_limit)

**Writing assignment 1 due at 11:59 PM.**

Week 6 (February 22): The Beauty and Logic of Regression

- Kellstedt and Whitten, Chapter 9

Week 7 (March 1): Linear Regression, Inference about the Estimator, and Model Fit

- Gross, Justin H. 2015. “Testing What Matters (If You Must Test at All): A Context-Driven Approach to Substantive and Statistical Significance.” *American Journal of Political Science* 59(3): 775-788. DOI: 10.1111/ajps.12149
  - What is the “null hypothesis”? What are we testing? Just because something is statistically significant, does that mean it is substantively significant?

Week 8 (March 8): Midterm (No Class)

**Midterm Exam due at 11:59 PM.**

Week 9 (March 15): Multivariate Regression and Omitted Variables Bias

- Achen, Christopher H. 2002. “Toward a New Political Methodology: Microfoundations and ART.” *Annual Review of Political Science* 5: 423-450. DOI: 10.1146/annurev.polisci.5.112801.080943

- Just because we should put a million variables in an OLS model, does that mean we should? How do we balance this against omitted variables bias?

- Kellstedt and Whitten, Chapters 10 and 11

**Writing assignment 2 due at 11:59 PM.**

Week 10 (March 22): OLS Extension I: Collinearity, Leverage, and Influence

Week 11 (March 29): OLS Extension II: Graphical Interpretations and Making Predictions

Week 12 (April 5): OLS Extension III: Homoscedasticity and Non-linearity

**Writing assignment 3 due at 11:59 PM.**

Week 13 (April 12): OLS Extension IV: Categorical Predictors

- Bell, Andrew, and Kelvyn Jones. 2015. “Explaining Fixed Effects: Random Effects Modeling of Time-Series Cross-Sectional and Panel Data.” *Political Science Research and Methods* 3(1): 133-153. DOI: 10.1017/psrm.2014.7

- A simple strategy when you have data over time

Week 14 (April 19): OLS Extension V: Interactions

- Brambor, Thomas, William Clark, and Matt Golder. 2006. “Understanding Interaction Models: Improving Empirical Analysis.” *Political Analysis* 14(1): 63-83. DOI: 10.1093/pan/mpi014
- We should be making pictures!
- Berry, William D., Matt Golder, and Daniel Milton. 2012. “Improving Tests of Theories Positing Interaction.” *The Journal of Politics* 74(3): 653-671. DOI: 10.1017/S0022381612000199
- We should be making pictures!
- Grissom, Jason A., Jill Nicholson-Crotty, and Sean Nicholson-Crotty. “Race, Region, and Representative Bureaucracy.” *Public Administration Review* 69(5): 911-919. DOI: 10.1111/j.1540-6210.2009.02040.x

- Excellent illustration of the theory behind an interaction

**April 26 (Monday): Final Exam.**

**April 28 (Wednesday): Writing assignment 4 due at 11:59 PM.**