**POLS 7014: Intermediate Political Methodology**

Spring 2022

Tuesdays, 3:45-6:45pm

Baldwin 101D

Course Instructor: Dr. Mollie Cohen

Office: International Affairs 311

Office Hours: Th, 12pm-1:50pm or by appointment

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**Course Description:**

This course presents an introduction to commonly used statistical tools for conducting causal and descriptive inference. Chief among these is ordinary least squares (OLS) regression, one of the most commonly used methodological tools in the social sciences. We will spend most the semester building up and breaking down this foundational model, with additional time devoted to special topics. By the end of the semester, students should understand how OLS models are estimated, the assumptions on which these models rest, and the consequences of violations of these assumptions. Students should also be able to read and interpret regression tables, and to estimate multiple regression models using standard statistical software packages.

**Required Readings**:

*Required:*

* Wooldridge, JM. 2009. *Introductory Econometrics: A Modern Approach.*

*Recommended*:

* Angrist, Joshua D., and Jörn-Steffen Pischke. 2008. *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.
* Imai, Kosuke. 2018. *Quantitative social science: An introduction*. Princeton University Press.
* Freedman, David A. 2009. *Statistical models: theory and practice*. Cambridge University Press.

**Course Requirements:**

**Reading:** You are responsible for reading all assigned material for each class period. In rare cases, readings may be adjusted during the semester.

**Problem Sets and Office Hours:** There are nine problem sets over the course of the semester. Problem sets are *due by 5pm on the Monday after the class in which they are assigned*, and are worth 5 points each.

Most of the assignments in this class will require you to spend a significant amount of time computing. Trouble shooting code can be extremely frustrating and time consuming, but the best way to learn how to code is to make and fix your own errors. You should therefore plan to spend several hours on problem sets that include a coding component. You are expected to communicate and collaborate with your peers about computing challenges. Because I expect you will be trouble shooting with your cohort, the final code you submit may be very similar. However, ***the write up for all assignments must be yours and yours alone***. You will receive assignments in class on Tuesdays. My **office hours** are on Thursdays. If you choose to attend office hours for help with problem sets, you must bring: 1. your complete, commented code, and 2. a detailed description of your attempts to resolve the issue.

You can also reach out to the **IA Data Helpdesk** (spia-methods-help@uga.edu) for general programming support.

**Final Paper:** There are no exams for this class. Instead, you are expected to write a 15-page research paper. You may replicate and extend the analysis from existing scholarly work or create an original model of your own. All papers must include a brief introduction to the question, a detailed description of the research design, documentation of all data sources used and variable creation, a multiple regression model, and tests for violations of assumptions. You must also include a complete list of referenced work (this does not count toward the page limit). You will also turn in your complete, commented code and datasets for replication. More detailed instructions will be provided in class.

**Final Presentation**: During the last weeks of class, you will give a 12-minute conference-style presentation of your final paper. In addition to giving the presentation, you are expected to engage actively with comments and questions from your classmates, and to incorporate this feedback into the final paper draft. More detailed instructions will be provided in class.

**Computing:** Many of your problem sets will require you to use statistical computing software. During class, we will walk through examples of the skills from your problem sets using Stata. The last hour of most class sessions will be an optional – but strongly recommended – Stata workshop, which will take place in the computer lab. You may use Stata or R, but you must include complete, commented code so that your results can be replicated by someone with no knowledge of the data or project.

**Attendance:** There is no attendance policy for this class. However, this is a Ph.D.-level methods course and I expect that you will attend and participate actively.

**Seminars:** You are required to attend at least five of this semester’s IA Speaker Series talks, which (with the exception of Dr. Melin’s talk) will be held over Zoom. Ideally, you will attend all of these talks. We will discuss the talks in class. If you are unable to attend the workshops due to conflicts with another class or your TA assignment, you must let me know by January 24, 2021. Speakers and seminar dates are listed below.

To receive credit for attending seminars, you must send me an email describing (1) one thing you learned from the talk, and (2) one question you have after attending the seminar. You must send this email *before the next class meeting* to receive credit.

Zoom Information for All Talks: <https://zoom.us/j/95554773574?pwd=V1RpSjVtVkNMSnd3c1lUQXFrU3dXZz09>

Meeting ID: 955 5477 3574

Passcode: IA

1. Dr. David Lazer (Northeastern University, networks and information) – January 28th at 3:00 pm
2. Dr. Prakash Kashwan (University of Connecticut, environmental governance – January 31st at 3:00 pm
3. Dr. Adam Enders (University of Louisville, conspiracy theories and partisanship) -February 4th at 3:00 pm
4. Dr. Michelle Jurkovitch (University of Massachusetts, Boston, norms and human rights) – February 18th at 3:00 pm
5. Dr. Michael Tomz (Stanford University, IR and IPE) - February 22nd at 3:00 pm
6. Dr. Erica Chenoweth (Harvard University, protests and terrorism) - February 25th at 3:00 pm
7. Dr. Jaskiran Dhillon (New School, political movements) – February 28th at 3:00 pm
8. Dr. Gary Goertz (University of Notre Dame, peace and rivalry) –March 3rd at 3:00 pm
9. Dr. Jessica Weeks (University of Wisconsin, IR and conflict), March 21st at 3:00 pm
10. Dr. Rochelle Terman (University of Chicago, human rights and gender) - March 25th at 1:30 pm
11. Dr. Molly Melin (Loyola Chicago, peace and conflict) – April 11th at 11:00 am IN PERSON
12. Dr. Megan Stewart (American University, rebel governance and civil war) – April 29th at 1:30 pm

**Course Grade:**

45% Problem Sets

35% Final Paper

10% Final project presentation

10% Seminar attendance

**Late or Missed Assignments:** If you do not complete assignments, you will receive a zero for the assignment unless you have a medical excuse, religious obligation, or family emergency. Permission must be granted prior to the missed deadline, with the exception of exigent circumstances. Late final papers will receive an immediate deduction of half a letter grade, and an additional half letter grade per day late.

**Academic Honesty Policy:**

*The academic honesty policy of the university is supplemented (not replaced) by an Honor Code which was adopted by the Student Government Association and approved by the University Council May 1, 1997, and provides: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." All students agree to abide by this code by signing the UGA Admissions Application.*

**Course Outline**

January 11. Why are we here?

* Reading:
	+ Wooldridge, Ch. 1

January 18. Probability, t-tests, differences of means

* Reading:
	+ Wonnacott & Wonnacott (Chs. 8-9) [on eLC]

Problem set 1 [due 1/24]

January 25. OLS: Simple regression model

* Reading: Wooldridge, Ch. 2

Problem set 2 [due 1/31]

February 1. OLS: Multiple regression model

* Reading: Wooldridge, Ch. 3

Problem set 3 [due 2/7]

February 8. Hypothesis Testing

* Reading: Wooldridge, Ch. 4

Problem set 4 [due 2/14 (happy Valentine’s Day!)]

February 15. Paper meetings I: bring your project proposal to your allotted meeting time

February 22. Paper meetings II: bring your project proposal to your allotted meeting time

March 1. Broken Assumptions (1)

* Reading: Wooldridge, Ch. 5

Problem set 5 [due 3/14]

**Spring Break: March 7-11**

March 15. Broken Assumptions (2)

* Reading: Wooldridge, Ch. 8

Problem set 6 [due 3/21]

March 22. Broken assumptions (3)

* Reading: TBD

Problem set 7 [due 3/28]

March 29. Interactions

* Reading: Wooldridge, Ch. 6

Problem set 8 [due 4/4]

April 5. Dummy variables

* Reading: Wooldridge, Ch. 7

Problem set 9 [due 4/11]

April 12. Special topics

* Reading: TBD

April 19. Paper presentations I

April 26. Paper presentations II

May 3. Lingering Questions

**Final paper due electronically May 11, by 12pm (noon)**