

PSC 621-001
Quantitative Methodology in Political Science II

Spring 2018
9am-11:30am
115 ten Hoor Hall

Professor George Hawley

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Office hours: Monday & Thursday 11:30am-1:00pm

Course Description

This course is a second graduate course for political methodology. The main goal for the semester is to apply our knowledge of statistics and probability to specific questions. Building on our knowledge of OLS, developed during the previous semester, students will learn new models for dealing with situations in which OLS is not appropriate, especially situations when the dependent variable is not continuous. Throughout the course we will work with the statistical software Stata.

Prerequisites

Students should have taken PSC 521 (Research Design) and PSC 522 (Quantitative Methods 1) or, at least, be familiar with materials covered in these courses.

Course Objectives

Upon successful completion of this course, students will be able to

- 1) understand the key assumptions of OLS regression.
- 2) test models to discern whether those assumptions are met.
- 3) run models that are appropriate to the given data.
- 4) understand and interpret these models.

Textbooks and Additional Materials

The following book is required:

- Scott Long, *Regression Models for Categorical and Limited Dependent Variables Using Stata*, 3rd Edition (College Station, TX: Stata Press, 2014)

The following book is *recommended* in order to help students better understand the materials covered both in the classroom and in the main textbooks.

Course Requirements and Grading

Each time we meet in the classroom, Professor Hawley will give a lecture on the week's topic, during which we will intensively use Stata under a lab-like setting. So, make sure that you bring your *laptop computer* to class (see Professor Hawley immediately for an alternative arrangement, if necessary).

Ultimately, the final course grading will be based upon three parts:

- 1) Papers (80%): The overwhelming majority of your final grade will be determined by your performance on a series of papers in which students will be expected to demonstrate mastery of a specified statistical concept.
- 2) Class Participation (20%): Even though this course is largely lecture-based, we learn from discussions. Note that *quality* is more important than quantity in general.

Students who take this course under the Pass/Fail option must receive a grade of C or better in order to obtain a Pass on their final grade. A final grade of "Incomplete" will only be given under exceptional circumstances and is solely at the discretion of Professor Hawley.

As a general rule, make-ups for any course requirements will not be given. Students who miss any requirements because of scheduled activities of an official University student organization, a religious holiday, or a verifiable illness should contact Professor Hawley *in advance* so that alternative arrangements can be made.

If there is a dispute regarding a grade, re-grading is possible under two conditions:

- All grade complaints must be typed and must clearly express specific concerns. These written statements must be accompanied by citations of support from course materials, i.e. readings, textbooks, and/or lecture notes, in order to ensure accuracy.
- The entire part, not just the section under dispute, must be subject to re-grading (by another faculty member in the Political Science department). Thus, it is very possible that a lower grade could eventually result.

Classroom Policies and Instructor Availability

I expect all students to behave professionally in this course. I am intolerant of disruptive behavior in the classroom, including talking during lectures, reading newspapers, and especially the ringing of cell phones or pagers. Laptops may be used for professional purposes, but not for playing games or surfing the Internet. Students engaging in

disruptive behavior will be asked to leave the classroom in order to preserve the learning environment for other students. Class discussions are expected to be civil, rational, and respectful of others' opinions. Please do not intimidate, patronize, or ridicule anyone else during the course of classroom activities.

If students would like to speak with me outside of class time, feel free to stop by my office (306 ten Hoor Hall) during regularly scheduled office hours (Tuesdays and Thursdays 11-12:30). If students are unable to attend office hours, but would like to meet with me, please contact me via email (ghawley@ua.edu) to arrange an appointment. I am typically quick to respond to such emails. I, unfortunately, cannot guarantee that I will be able to meet with students that come to my office without first scheduling a time to see me.

Academic Integrity

No form of academic dishonesty will be tolerated. The University of Alabama has detailed its policies on academic integrity (<http://www.studenthandbook.ua.edu/conduct.html>). Students should acquaint themselves with policies concerning cheating, fabrication, plagiarism, and academic interference. Any submission of work by a student in this course constitutes a certificate that the work complies with university policies on academic integrity.

The University of Alabama is committed to an ethical, inclusive community defined by respect and civility. The UAct website (www.ua.edu/uact) provides a list of reporting channels that can be used to report incidences of illegal discrimination, harassment, sexual assault, sexual violence, retaliation, threat assessment or fraud.

Student Disabilities

Any student with disabilities of any kind (e.g. physical, learning, psychiatric, systemic, vision, hearing, etc.) who needs to arrange reasonable accommodations should contact the Professor Hawley and the Office of Disability Services at the beginning of the semester.

Tentative Schedule

Below is a tentative schedule for the semester. Professor Hawley reserves the rights to alter the reading, homework assignments, and test date in a timely fashion according to the progress of the class. **Stata** indicates the Long (2014).

Time	Topic	Reading	Assignments
Week 1	Introduction		Paper 1 Assigned
Week 2	1. Review of Stata and data management. 2. Review of OLS.	Stata 2	
Week 3	Review of OLS (continued)	TBD	Paper 1 due; paper 2 assigned
Week 4	Interaction terms	TBD	
Week 5	Review of OLS assumptions	TBD	
Week 6	Binary outcomes	Stata 5	Paper 2 due; Paper 3 assigned
Week 7	Binary outcomes, continued	Stata 6	
Week 8	Ordinal outcomes	Stata 7	
Week 9	Nominal outcomes.	Stata 8	Paper 3 due; Paper 4 assigned
Week 11	Count outcomes	Stata 9	
Week 12	Multilevel Modeling	TBD	Paper 4 due; Paper 5 assigned
Week 13	Multilevel Modeling cont.		
Week 15	Instrumental variables	TBD	
Week 16	Factor Analysis	TBD	Paper 5 due

No Final Exam