

Prerequisites

Enrollment restricted to political science majors only.

Expectations

College is an environment in which you learn how to manage your time and set your priorities. I do not take attendance. There is, however, a strong correlation between course attendance and performance. We will spend a considerable amount of class time in the computer lab. Your performance in this class, particularly on the homework assignments and the research paper, is strongly related to your attendance at these lab sessions. The success of your final research paper is strongly related to your attendance at lecture sessions. Moreover, it is possible for part of your grade to be determined by in-class quizzes (see below). I recommend, therefore, that you attend class regularly. If you choose to come to class, you should do so responsibly. I fully expect that you will have done any assigned readings before coming to class. Class is much more interesting when you engage with both your instructor and the material. 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.

Required Materials

There is only one required textbook for this class (referred to in this syllabus as "K&W").

Kellstedt, Paul M. and Guy D. Whitten. 2013. *The Fundamentals of Political Science Research (2nd Edition)*. Cambridge. ISBN: 978-1-107-62166-4.

The textbook is available at the MSC Bookstore, as well as the internet. There are older editions of this textbook. If you get an older edition, I can't promise that chapters and material will be identical. I will teach from the second edition; roll the dice at your own discretion. **There will be additional, (usually) weekly readings posted to eCampus. These are not outlined in the syllabus, but they will be posted online and announced in class.** You are responsible for reading the assigned textbook reading *and* any other assigned reading by the *Monday* of that week of class.

You must obtain a copy of R (available from <https://cran.revolutionanalytics.com/>). You will probably hate, then learn to love, using R. We will use it because it is (a) free, (b) flexible enough to test most theories of political science, and (c) widely popular in both public service and private industry. We will devote an extensive amount of class time to learning to use R effectively.

Assignments

The course is divided into the following components:

| | |
|------------------------------------|------------------|
| Homework (five assignments) | 20 points (each) |
| Research reviews (two assignments) | 25 points (each) |
| Midterm examination | 100 points |
| Writing assignment 1 | 25 points |
| Writing assignment 2 | 25 points |
| Writing assignment 3 | 50 points |
| Writing assignment 4 | 150 points |
| <hr/> Total | <hr/> 500 points |

In order, those components are ...

Homework: these will be assigned in class and due one week from the day they are assigned. They will be exercises in R, with datasets provided on eCampus, that will require you to apply concepts and code learned in class to different data. Homework assignments *must be typewritten*, and they *must look professional*. You should not simply copy and paste output from R, unless the assignment specifically requires that you do so.

Learning R is a difficult exercise. The best coders and practitioners rarely work alone, and I don't find it realistic to ask you to work alone, either. To reiterate: it is permissible to work with your classmates to solve R problems and work on coding assignments. This comes with two caveats: (1) you should never “divide and conquer” the assignment. All students are responsible for all portions of each assignment (this is actually easy to detect if multiple students get the same questions incorrect), and (2) you are not allowed to collaborate on the “applied” or “discussion” portions of questions. For instance, if an assignment says “what does X mean for our study of politics,” you must answer it on your own.

Specific homework assignments and due dates will be discussed through the semester. **NOTE:** I reserve the right to replace some of your homework assignments with in-class quizzes if I feel that you are not preparing effectively for each class session.

Research reviews: part of the course is learning to read and consume political science. Many of you have not read political science research (such as journal articles) before this course. As such, we are going to discuss how to effectively read an article and digest its scientific content. You will then be responsible for producing a research review of two of the assigned readings. An example of this review will be posted to eCampus, but it will consist of five parts:

1. *Overview:* Describe, in one or two sentences only, the basic research question and findings in the article.
2. *Theory:* What is the basic theory in the article? What are the main hypotheses in the article?
3. *Data and Methods:* What data did the authors use? What are the sources of the data? How are the key independent and dependent variables measured?

4. *Findings*: Summarize the main findings of the paper. Talk both generally and specifically (words and numbers).
5. *Future Research*: What are your reactions to the research? Did the authors omit any important variables? Are the measures of the concepts “good” measures? If you had to extend the research, what is an important future direction?

Research reviews are expected to be a maximum of one page. Bullet points are encouraged (see the example). We will read an average of an article a week (sometimes more, sometimes less). You can choose any two articles to review that you like. If you are completing the research review of a particular article in any given week, it is due on the *Monday of the week of the class for which the article is assigned*. So if, for instance, you want to do the research review for the article assigned for Week 3—Jones (2013) *Do Major Policy Enactments Affect Public Evaluations of Congress? The Case of Health Care Reform*—it would be due on the Monday of Week 3 (February 1).

You are free to submit as many research reviews as you like in order to earn full credit. You cannot revise a research review, but you can submit a new research review.

Midterm examination: there is a midterm exam on March 11. We will discuss the midterm exam in detail as the date approaches. *There is no final examination.*

Writing assignments: ultimately, you will be responsible for identifying a unique research question, gathering the data to test your research question, discussing relevant political science literature regarding your research question, testing your theory, and communicating your results. This large paper will be divided into four assignments, spaced throughout the semester to ensure that you are developing your research at an appropriate pace. For each assignment, you will receive more detailed instructions on the dates identified below.

1. Research proposal (25 points). Identify a research question. What is the main independent variable of interest? What is the main dependent variable of interest? What data could you *potentially* use to test the research question? *Maximum length: two pages. Assigned February 1; Due February 12.*
2. Theory (25 points). Using the scientific language of hypotheses and theory from class, what are the specific hypotheses you are testing in your research question? What are key independent variables that must be controlled for to determine causality? What have other political scientists found regarding your research question? *You must identify at least five political science articles relevant to your research question. Minimum length: two pages. Assigned February 15; Due March 4.*
3. Research design (50 points). Describe exactly the statistical techniques you will use to test your hypotheses. Describe the data that you will use to test your hypotheses. Present simple (bivariate) evidence regarding the relationship between your dependent variable and key independent variable. Present descriptive statistics for your data. Present at least one plot of your data. Tables and Figures do not count towards the length of your assignment. *Minimum length: three pages. Assigned March 7; Due March 23.*

4. Final paper (150 points). Propose a research question, review the literature on a topic, address a plausible causal theory, frame a testable hypothesis about a relationship between key variables, test the hypothesis using statistics, present the results in Tables and Figures, discuss the implications of your findings, and address how your findings compare with other political science research. *You must identify at least ten political science articles relevant to your research question. Minimum length: ten pages. Maximum length: fourteen pages. Works cited do not count towards page length. Assigned March 28; Due April 29.*

Makeups and Grades

Writing assignments and homework assignments must be turned in, in hard copy, on the day assigned. Research reviews will only be accepted on Mondays. Makeup examinations and assignments will only be offered/accepted if the student has a University excused absence, which can be found at <http://student-rules.tamu.edu/rule07>. It is your responsibility to ensure that your absence is covered by the University, and it is your responsibility to comply with Student Rule 7.3, which requires that you notify me of your absence prior to the date of absence if such notification is feasible. If that is not feasible, you must notify me by the end of the second working day after the absence. 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 Student Rule 7 also allows for makeup examinations and assignments 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.

I will not accept research reviews on any days other than Mondays, as you have more than enough opportunities to complete these over the semester. I will only offer makeup midterm examinations in accordance with Student Rule 7, outlined above. If you turn in a homework assignment or a writing assignment late, you will be penalized 15 points (not 15%, but 15 points) each day that the relevant assignment is late. Dogs do not eat homework, and there is a computer lab with a capable printer in the building. I fully expect you to turn in your assignments at the beginning of the class period on the specified due date.

I use the following grading scale. To maintain fairness, I do not change grades under any circumstances except when I make a mathematical error in computing your grade.

| | | |
|-----------------------|---------------|---|
| 447.5 - 500 points | = 89.5-100: | A |
| 397.5 - 447.49 points | = 79.5-89.49: | B |
| 347.5 - 397.49 points | = 69.5-79.49: | C |
| 297.5 - 347.49 points | = 59.5-69.49: | D |
| 297.49↓ | = 59.49↓: | F |

There is a course grade calculator at <http://tinyurl.com/209gradecalculator>. There is no extra credit.

Contacting Me

I'm in the Allen Building every day, but especially during my listed office hours. I check my email regularly. I encourage you to see me in person if possible, but you can also email me. If you do contact me over email, I encourage you to follow these guidelines. First: include the course number [209] 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 Texas A&M University official email address. In the event that I need to contact you, it will almost certainly be at your `@tamu.edu` email address. You should check this email often!

At some point over the semester, you will almost certainly become frustrated with R. My first recourse: if you don't know how to do something in R, or don't know the function, **Google** it! R is supported by a core group of users who are all nerds with nothing better to do than answer questions about R. I promise, someone has asked your question. If **Google** fails, feel free to email me. I am happy to answer R questions, but I don't ensure that I can answer them at 2:30 AM before assignments. If you do email me, **YOU MUST BE SURE TO INCLUDE A MINIMAL WORKING EXAMPLE (MWE).** This means email me your data (if not provided by me), your code, and the output R is giving you. By "code," I mean the stuff in the R Editor. By "output," I mean the stuff in the R Console. If you email me "when i run `mean(variable)` it says NA does that mean r is broken thx" Instead of "Here is my data. I created the variable `x <- data$x`, but when I run `mean(x)`, it gives me no output. Here's what I tried." I can basically do nothing with the first one, because I don't have your data and I have no way to tell what is going on. The second one, though, we can work with!

Aggie Honor Code

An Aggie does not lie, cheat, or steal, or tolerate those who do.

Texas A&M 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. Be aware that violating the Aggie Honor Code can lead directly to failing the course and being referred to the Aggie Honor System Office. For additional information visit <http://aggiehonor.tamu.edu>.

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 contact Disability Services, in Cain Hall, Room B118, or call 979.845.1637. For additional information visit <http://disability.tamu.edu>.

Any requests or arrangements made with the instructor in person must be followed up with an official email request for documentation.

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 20 - 22): What is “Politics” or “Science”? How is Political Science “Scientific”?

K&W, Chapter 1.

Hill, Kim Quaile. 2004. “Myths about the Physical Sciences and Their Implications for Teaching Political Science.” *PS: Political Science and Politics* 37(3): 467-471.

<http://www.jstor.org/stable/4488865>

Week 2 (January 25 - 29): Developing Theories, Testing Hypotheses, and Reading Research

K&W, Chapter 2 and 12 (just 12.1 and 12.2).

“How to Read and Take Notes on a Scholarly Journal Article.”

<http://pasadena.edu/hstutoringlab/writing/writingscholarlyarticle.cfm>

Week 3 (February 1 - 5): Research Design and Causality

K&W, Chapters 3 and 4.

Jones, David R. 2013. “Do Major Policy Enactments Affect Public Evaluations of Congress? The Case of Health Care Reform.” *Legislative Studies Quarterly* XXXVIII(2): 185-204.

<http://onlinelibrary.wiley.com/doi/10.1111/lsq.12010/epdf>

Week 4 (February 8 - 12): (More) Causality and Research Design

K&W, Chapters 3 and 4 (re-read them).

Other political science reading to be assigned.

February 12 (Friday): Writing Assignment 1 Due.

Week 5 (February 15 - 19): Measurement

K&W, Chapter 5.

Other political science reading to be assigned.

Week 6 (February 22 - 26): Probability, Inference, and the Logic of Hypothesis Testing

K&W, Chapters 6 and 7.

Other political science reading to be assigned.

Week 7 (February 29 - March 4): Where to Find Political Science Data and Using R

Other political science reading to be assigned.

March 4 (Friday): Writing Assignment 2 Due.

Week 8 (March 7 - 11): Catchup and Midterm

March 7 (Monday): Mid-semester grades posted.

March 11 (Friday): Midterm Examination.

Week 9 (March 14 - 18): No Class: Spring Break

Week 10 (March 21 - 25): The Beauty and Logic of Regression

K&W, Chapter 8.

Other political science reading to be assigned.

March 23 (Wednesday): Writing Assignment 3 Due.

March 25 (Friday): No class (University holiday).

Week 11 (March 28 - April 1): Two-Variable Regression and Model Fit

K&W, Chapter 8.

Other political science reading to be assigned.

Week 12 (April 4 - 8): Multiple Regression in Theory

K&W, Chapter 9.

Other political science reading to be assigned.

April 8 (Friday): No class (political science conference meetings).

Week 13 (April 11 - 15): Multiple Regression in Practice

K&W, Chapter 10.

Other political science reading to be assigned.

Week 14 (April 18 - 22): Extensions: Interaction Models, Maximum Likelihood, Pretty Pictures in R

K&W, Chapter 11.

Other political science reading to be assigned.

April 19 (Tuesday): Last day to Q-drop.

Week 15 (April 25 - April 29): Writing Clinic

K&W, Chapter 12.

April 29 (Friday): Writing Assignment 4 Due.