

## **PSC 2101: Scope and Methods of Political Science**

Spring 2018, Tuesday and Thursday, 8:00am-9:15am

The George Washington University, Department of Political Science

Instructor:

Dr. Adam Hughes

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Office Hours: By appointment

### **Course Description**

This course explores research methods in Political Science, with a focus on quantitative methodology. It provides an overview of how political scientists conceptualize, count, categorize, measure, and interpret the world around them. It does not focus on a specific political issue, country, era, or topic, but rather, provides students with a more general basis for evaluating and conducting research. We will use the R statistical program as a tool to help explore and analyze data. After completing this course, students will become more critical consumers of social scientific research. Students will also be equipped with the necessary resources to conduct their own research.

### **Learning Objectives**

As a result of completing this course, students will be able to:

- undertake independent empirical research projects.
- read and understand a wider range of literature in political science and other social sciences.
- critically evaluate research that uses statistical methods, whether in political science, policy analysis, sociology, health and medicine, or other fields.
- use the R statistical program to explore data.

### **Required Materials**

- Kellstedt, Paul M. and Guy D. Witten. 2013. *Fundamentals of Political Science Research*, 2<sup>nd</sup> Edition. Cambridge University Press.
- Whelan, Charles. 2013. *Naked Statistics: Stripping the Dread from the Data*. Norton.

### **Optional Texts (selections will be available online)**

- Salganik, Matthew J. 2017. *Bit by Bit: Social Research in the Digital Age*. Princeton University Press.
- Monogan, James E. 2015. *Political Analysis Using R*. Springer.

## Grades

As a rule, there will be **no make-up assessments, make up tests, or deadline extensions given in this course**. Exceptions only will be made with prior consent for planned events such as sponsored GWU activities or religious observances or under unusual circumstances such as a documented medical emergency. Your course grade will be based on the following components:

20%: Participation  
40%: Assessments  
20%: Midterm exam  
20%: Final exam

Your participation grade will your contributions to in-class discussion (and necessarily your attendance).

We will have ten assessments throughout the semester. They will consist either of an in-class quiz (administered on Blackboard) or a take home assignment. Your eight highest assessment scores will count toward your final grade. The assessments will either take place or be assigned on Thursdays on the following dates: 1/25, 2/1, 2/8, 2/15, 2/22, 3/1, 3/22, 4/5, 4/2, and 4/19. Take home assessments are due the following Tuesday. **The assessments cover the material assigned for the dates of the assessment.** So, for example, for the 1/25 assessment covers material from Chapter 1 of Kellstedt and Whitten (as well as prior material).

The midterm and final exams will be closed book, closed note exams, though you will be allowed to bring a single page (front and back) of notes to each.

### Week 1: Introduction

1.16:

No assigned reading

1.18:

Silver, N. 2017. "The Real Story of 2016." FiveThirtyEight.

<http://fivethirtyeight.com/features/the-real-story-of-2016/>

Beckman, M. N. 2017. "Did Nixon quit before he resigned?" *Research and Politics* April-June: 1-17.

<http://journals.sagepub.com/doi/pdf/10.1177/2053168017704800>

Mitchel, A., Simmons, K., Matsa, K. E., Silver, L. 2018. "Publics Globally Want Unbiased News Coverage, but Are Divided on Whether Their News Media Deliver" Pew Research Center. <http://www.pewglobal.org/2018/01/11/publics-globally-want-unbiased-news-coverage-but-are-divided-on-whether-their-news-media-deliver/>

## Week 2: Research Design

1.23:

Bartels, Larry. 2003. "Democracy with Attitudes."

Whelan, C. 2013. *Naked Statistics*. Introduction and Chapter 1.

"Introduction to R, RStudio"

<https://web.stanford.edu/class/stats101/intro/intro-lab01.html>

1.25:

### **Assessment 1 (Take Home)**

KW Chapter 1 (p. 1 – 23)

"Basic R Commands"

[https://www.youtube.com/watch?v=h\\_Nruq9-NQw](https://www.youtube.com/watch?v=h_Nruq9-NQw)

## Week 3: Theory and Causality

1.30:

### **Assessment 1 Due**

KW Chapter 2 (p. 24 – 50)

Gilens, M. and Page, B.I. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." *Perspectives on Politics* 12.3: 564-581.

2.1:

### **Assessment 2 (Quiz)**

KW Chapter 3 (p. 51 – 68)

Ahlquist, J. S. and Levi, M. 2011. "Leadership: What It Means, What It Does, and What We Want to Know About It." *Annual Review of Political Science* 14: 1 – 24.

## Week 4: Measurement and Survey Research

2.6:

KW 5.1 – 5.7 (p. 92 – 111)

Kennedy, C. 2017. "How can a survey of 1,000 people tell you what the whole U.S. thinks?" Pew Research Center. <http://www.pewresearch.org/fact-tank/2017/05/12/methods-101-random-sampling/>

Ginsberg, B. 1986. *The Captive Public*. Chapter 3.

2.8:

**Assessment 3 (Take Home)**

Kennedy, C. and Deane, C. 2017. "A basic question when reading a poll: Does it include or exclude nonvoters?" Pew Research Center.

<http://www.pewresearch.org/fact-tank/2017/02/16/does-poll-include-or-exclude-nonvoters/>

Salganik, M. 2017. *Bit by Bit: Social Research in the Digital Age*. 3.3-3.4

<http://www.bitbybitbook.com/en/asking-questions/total-survey-error/>

Huber, G. A., and Paris, C. 2013. "Assessing the Programmatic Equivalence Assumption in Question Wording Experiments: Understanding Why Americans Like Assistance to the Poor More than Welfare." *Public Opinion Quarterly* 1.1: 385-397.

Week 5: Experiments

2.13:

**Assessment 3 Due**

KW 4.1 – 4.2.3 (p. 69 – 82)

Salganik, M. 2017. *Bit by Bit: Social Research in the Digital Age*. 4.2

<http://www.bitbybitbook.com/en/running-experiments/what-exp/>

Hughes, A. 2015. "Visualizing Inequality: How Graphical Emphasis Shapes Public Opinion." *Research and Politics* October-December: 1-5.

<http://journals.sagepub.com/doi/pdf/10.1177/2053168015622073>

2.15:

**Assessment 4 (Quiz)**

Keele, L. 2015. "The Discipline of Identification." *Political Science and Politics* January: 102-105.

Panagopoulos, C. 2011. "Thank You for Voting: Gratitude Expression and Voter Mobilization." *Journal of Politics* 73.3: 707-717.

Butler, D. M. and Broockman, D. E. 2011. "Do Politicians Racially Discriminate Against Constituents? A Field Experiment on State Legislators." *American Journal of Political Science*, 55: 463-477.

## Week 6: Descriptive Statistics

2.20:

Whelan, C. 2013. *Naked Statistics*. Chapter 2.

Freedman, D., Pisani, R., and Purves, R. 2007. "The Average and the Standard Deviation" and "Drawing a Histogram." *Statistics*. P. 35-37 and 57-73

2.22:

### **Assessment 5 (Quiz)**

Monogan, J.E. 2016. "Descriptive Statistics" *Political Analysis Using R* (p. 53-62).

KW 5.8 – 5.12 (111 – 126)

Payson, J. 2016. "When are Local Incumbents Held Accountable for Government Performance? Evidence from US School Districts." *Legislative Studies Quarterly* 42.3: 421-448. [Focus on 421 – 431]

## Week 7: Probability and Statistical Inference

2.27:

Whelan, C. 2013. *Naked Statistics*. Chapters 6, 8.

Freedman, D., Pisani, R., and Purves, R. 2007. "What are the Chances?" *Statistics*. P. 221-236.

3.1:

### **Assessment 6 (Take Home)**

KW Chapter 6 (p. 129 – 144)

"Basic Probability Simulations" [https://rstudio-pubs-static.s3.amazonaws.com/21866\\_0cfc0bfb22904a76924ac89e9b8f18a7.html](https://rstudio-pubs-static.s3.amazonaws.com/21866_0cfc0bfb22904a76924ac89e9b8f18a7.html)

## Week 8: Inference Continued

3.6:

### **Assessment 6 Due**

Silver, N. 2017. "The Media Has a Probability Problem." FiveThirtyEight. <https://fivethirtyeight.com/features/the-media-has-a-probability-problem/>

Whelan, C. 2013. *Naked Statistics*. Chapter 9.

3.8:  
**Midterm Exam**

\*\*\* Spring Break \*\*\*

Week 9: Bivariate Analysis

3.20:  
Whelan, C. 2013. *Naked Statistics*. Chapter 4.

KW Chapter 7 (145 – 170)

3.22:  
**Assessment 7 (Take Home)**

Monogan, J.E. “Basic Inferences and Bivariate Association” *Political Analysis Using R* (p. 63 – 76)

Binder, S. 2015. “The Dysfunctional Congress.” *Annual Review of Political Science* 18: 7.1-7.17.

Week 10: Regression Models

3.27:  
**Assessment 7 Due**

KW 8.1 – 8.4.3 (171 – 181)

Linear Regression  
<http://r-statistics.co/Linear-Regression.html>

3.29:  
KW 8.4.4 – 8.5.4 (181 – 194)  
“Statistics with R (1): Linear regression”  
<https://www.youtube.com/watch?v=Xh6Rex3ARjc>

Week 11: Multiple Regression and Model Predictions

4.3:  
KW Chapter 9 (197 – 219)

4.5:  
**Assessment 8 (Take Home)**

RE-READ: Gilens, M. and Page, B.I. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." *Perspectives on Politics* 12.3: 564-581.

Harbridge, L., Malhotra, N., and Harrison, B. F. 2014. "Public Preferences for Bipartisanship in the Policymaking Process." *Legislative Studies Quarterly* 39.3: 327 – 355.

#### Week 12: Presenting and Evaluating Evidence

4.10:

##### **Assessment 8 Due**

Guess, A. 2015. "Measure for Measure: An Experimental Test of Online Political Media Exposure." *Political Analysis*, 23.1: 59-75.

Stone, D. 2018. "The Ethics of Counting." *Political Science & Politics*. 51.1: 7-16.

4.12:

##### **Assessment 9 (Quiz)**

"Data Visualization Using R"

<https://www.youtube.com/watch?v=WOhsomgBNhM>

Healy, K. and Moody, J. 2013. "Data Visualization in Sociology."

Gelman, A. and Unwin, U. 2012. "Infovis and Statistical Graphics: Different Goals, Different Looks."

#### Week 13: Transparency and Replicability

4.17:

Singal, J. 2015. "The Case of the Amazing Gay-marriage Data: How a Graduate Student Reluctantly Uncovered a Huge Scientific Fraud." *The Cut*.

<https://www.thecut.com/2015/05/how-a-grad-student-uncovered-a-huge-fraud.html>

Dominus, S. 2017. "When the Revolution Came for Amy Cuddy." *The New York Times*. <https://www.nytimes.com/2017/10/18/magazine/when-the-revolution-came-for-amy-cuddy.html>

Kalla, J., and Broockman, D. E. 2017. "The Minimal Persuasive Effects of Campaign Contact in General Elections: Evidence from 49 Field Experiments" *American Political Science Review* 1 – 19.

4.19:

**Assessment 10 (Quiz)**

Read the description of the Cooperative Congressional Election Study (CCES):  
<https://cces.gov.harvard.edu>

Richman, J. and Earnest, D. 2014. "Could non-citizens decide the November election?" *The Monkey Cage*. [https://www.washingtonpost.com/news/monkey-cage/wp/2014/10/24/could-non-citizens-decide-the-november-election/?utm\\_term=.b3e0120039b0](https://www.washingtonpost.com/news/monkey-cage/wp/2014/10/24/could-non-citizens-decide-the-november-election/?utm_term=.b3e0120039b0)

Ansolabehere, S., Luks, S., and Schaffner, B. 2014. "The perils of cherry picking low frequency events in large sample surveys." Cooperative Congressional Election Study. <https://cces.gov.harvard.edu/news/perils-cherry-picking-low-frequency-events-large-sample-surveys>

Ashwanden, C. "Science Isn't Broken – It's just a hell of a lot harder than we give it credit for." *FiveThirtyEight*. <https://fivethirtyeight.com/features/science-isnt-broken/#part1>

Week 14: Data Science and Machine Learning

4.24:

Salganik, M. 2017. *Bit by Bit: Social Research in the Digital Age*. 1.1 – 1.4.  
<http://www.bitbybitbook.com/en/introduction/>

Messing, S., van Kessel, P., and Hughes, A. 2017. "Partisan Conflict and Congressional Outreach." Pew Research Center. <http://www.people-press.org/2017/02/23/partisan-conflict-and-congressional-outreach/>

4.26:

Salganik, M. 2017. *Bit by Bit: Social Research in the Digital Age*. 2.4  
<http://www.bitbybitbook.com/en/observing-behavior/designs/>

Grimmer, J. 2015. "We Are All Social Scientists Now: How Big Data, Machine Learning, and Causal Inference Work Together." *Perspectives on Politics* January: 80-83.

**Final Exam (TBD)**