Course Information

The George Washington University
Department of Political Science
Political Science 2101.10
Scope and Methods of Political Science
Spring 2018
221 Funger Hall
Tuesday and Thursday 9:35-10:50 a.m.

Instructor Information

Associate Professor of Political Science, Public Policy and Public Administration, and
International Affairs
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Steven J. Balla received his B.A. in government and economics from Franklin and Marshall
College and his M.A. and Ph.D. in political science from Duke University. He studies public
participation in policymaking in China and the United States, making extensive use of political
science research methods. Click here, here, and here for examples of his recent research. He has
served as a consultant to the U.S. federal government, as well as a Fulbright Scholar at Peking
University in Beijing and Nankai University in Tianjin. He is currently working on a project on
mass comment campaigns in American policymaking and a book on the Internet and political
reform in China.

Course Description

Why did Donald Trump win the 2016 U.S. presidential election? Would stricter gun laws reduce
the incidence and severity of mass shootings? Do economic sanctions against foreign
governments, such as North Korea, work? You have undoubtedly debated questions such as
these with your family, friends, colleagues, and fellow students. In this course, we will develop
skills designed to answer such questions, thereby enhancing our understanding of the world of
politics and public policy.

The course does not focus on any one specific topic in political science (e.g., the presidency,
international law), but rather on how to study these institutions and processes. The course cuts
across the political science curriculum, thereby providing students with an introduction to
concepts and tools that are applicable in other courses, as well as at work and in everyday life.
The course covers a variety of specific topics, from fundamental concepts such as hypotheses and variables to advanced tools such as multiple regression. It also provides students with opportunities to put these concepts and tools into practice, as well as exposure to contemporary examples of political science research and interpretations of research and current events.

**Learning Objectives**

Research design and statistical analysis are indispensable components of political science. It is therefore essential that political science majors receive a basic introduction to the scope and methods of political science. By the end of the course, students will develop the knowledge and skills to achieve two primary goals: (1) Students will be able to identify and analyze the key components of research designs and statistical analyses. (2) Students will be able to design their own research projects and carry out their own statistical analyses.

**Course Readings**


The remaining readings are available via Blackboard.

**Course Organization**

1. Overview: The course provides students with theoretical training and practical experience in the scope and methods of political science. The Johnson, Reynolds, and Mycoff text introduces the building blocks of political science research methods, such as measurement, sampling, and descriptive statistics. The remaining readings introduce students to examples of political science research and interpretations of research and current events.

2. Students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction. There are 2.5 hours of direct instruction and a minimum of 5 hours of independent learning or 7.5 hours per week.

3. Research project: Students are required to complete a semester-long research project. This project will be completed in stages, with students first crafting a research design (February 22), then constructing a data set (March 27), then conducting descriptive and bivariate statistical analysis (April 12), and finally presenting to the class the results of multiple regression analysis (April 19 and April 24).

4. Skills assessments: Students are required to complete a pair of assessments on particular skills that will be acquired in the course. The first assessment is a quiz (February 8) on levels of measurement and units of analysis. The second assessment is an examination (April 5) on calculating and interpreting descriptive and bivariate statistics.
5. Human subjects certification: Students are required to secure human subjects certification (March 1) from the Collaborative IRB Training Initiative (CITI).

6. Class attendance: Students who attend every class will receive a grade of 100 for class attendance. Students who miss one or two classes will receive a grade of 95. Students who miss three or four classes will receive a grade of 85. Students who miss five classes will receive a grade of 75. Students who miss six classes will receive a grade of 65. Students who miss seven or more classes will receive a grade of 55.

7. Grading scale: A/95, A-/91, B+/88, B/85, B-/81, C+/78, C/75, C-/71, D+/68, D/65, D-/61, F/55.

8. Late Policy: Any assignment not submitted on time is subject to a letter grade penalty for each day, including Saturday and Sunday, that it is late (i.e., A becomes a B, A- becomes a B-, etc.). A day is defined as beginning at the time an assignment is due (e.g., at the beginning of class on February 20 for the research design). In other words, any assignment turned in within 24 hours of the deadline will be considered 1 day late, any assignment turned in between 24 and 48 hours after the deadline will be considered 2 days late, and so on.

**Course Requirements**

1. Research design = 20%
2. Data set construction = 15%
3. Descriptive and bivariate statistical analysis = 20%
4. Multiple regression analysis presentation = 10%
5. Quiz on levels of measurement and units of analysis = 5%
6. Examination on calculating and interpreting descriptive and bivariate statistics = 15%
7. Human subjects certification = 5%
8. Class attendance = 10%

**University Policy on Observance of Religious Holidays**

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.

**Academic Integrity Code**

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For details and complete code, see: studentconduct.gwu.edu/code-academic-integrity.

**Safety and Security**
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

**Support for Students Outside the Classroom**

*Disability Support Services (DSS)*

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information see: disabilitysupport.gwu.edu/.

*Mental Health Services 202-994-5300*

The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. For additional information see: counselingcenter.gwu.edu/.

**Session 1—January 16**

Introduction to and overview of the course

What are the scope and methods of political science? How will this course help us enhance our understanding of politics and public policy?

**Session 2—January 18**

Science and politics

What does it mean to study politics and public policy scientifically? How is science similar to and different from other ways of generating knowledge? What are the strengths and limitations of science as a way of enhancing our understanding of politics and public policy?


**Session 3—January 23**

Variables and hypotheses

What are variables and hypotheses? What are the different types of variables and hypotheses? Why is it important to be consistent when specifying, analyzing, and making inferences from particular units of analysis?
Session 4—January 25

Levels of measurement

What is measurement? What properties are possessed by different types of measures? What factors can and do affect decisions about the levels at which particular concepts and variables are measured?

Session 5—January 30

Reliability and validity of measures

How can we distinguish between accurate measures and measures that are filled with error? What are the different ways of assessing the reliability and validity of measures?

Session 6—February 1

Experimental designs

What is the classic experimental design? In what ways, and for what purposes, do researchers modify this design? What are the standards by which experimental designs are evaluated?

Session 7—February 6

Observational designs
What are the fundamental principles that govern research in non-experimental settings? What are the advantages and disadvantages of different types of observational designs?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 6, pp. 185-211

Session 8—February 8

Working session (research design)

How should students get started in developing research designs? What uncertainties must be clarified before projects can be carried out?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 3

Session 9—February 15

Research on human subjects

What are the ethical issues that arise when conducting human subjects research? How are these issues balanced against the benefits of scientific knowledge?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 8

Session 10—February 20

Sampling

What are the different types of samples that researchers employ? What is the distinction between probability and non-probability sampling? How is sampling error determined? What is the relationship between the sample mean and the population mean? How big do samples need to be to provide portraits of underlying populations that are, in expectation, reasonably accurate?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 7

Peverill Squire, “Why the 1936 Literary Digest Poll Failed”

Session 11—February 22

Issues in survey research

What are the different types of surveys? What standards are used to evaluate response rates and the quality of the responses generated by surveys? Why are question wording, type, and order
important? Why might the results of particular surveys be interpreted and understood in multiple ways? What are the issues surrounding the emphasis of certain questions and respondents?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 10

Lee Sigelman, “Question-Order Effects on Presidential Popularity”

**Session 12—February 27**

Document analysis

What is the scope of the information that falls under the classification of document analysis? What is content analysis? What are the advantages and disadvantages of conducting document analysis?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 9

Lee Sigelman and Emmet H. Buell, Jr., “You Take the High Road and I'll Take the Low Road?: The Interplay of Attack Strategies and Tactics in Presidential Campaigns”

**Session 13—March 1**

Working session (data set)

What is a data set? How does one build a data set in SPSS?

James M. Carlson and Mark S. Hyde, Doing Empirical Political Research, Ch. 8

**Session 14—March 6**

Measures of central tendency

What are statistics? What is univariate analysis? What are measures of central tendency? What types of measures of central tendency are appropriate for variables measured at different levels?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 11, pp. 348-361

**Session 15—March 8**

Measures of dispersion

What are measures of dispersion? In what ways do measures of dispersion provide information that is different from measures of central tendency? How is the standard deviation calculated?
Session 16—March 20

Distributions and descriptive statistics
What is the normal distribution? How can the properties of the normal distribution be used to conduct univariate analysis?

Session 17—March 22

Measures of association
What is an association? What are the key components of associations? What statistics can be used to evaluate the direction and strength of associations?

Session 18—March 27

Hypothesis testing for categorical variables
How can statistical significance be assessed in the context of categorical variables? How is the chi-square statistic calculated?

Session 19—March 29

Hypothesis testing for continuous variables
What are the ways in which statistical significance can be assessed for variables that are continuous? What is analysis of variance? How are difference of means tests interpreted?

Session 20—April 3
Working session (calculating and interpreting descriptive and bivariate statistics)

How are descriptive and bivariate statistics calculated by hand? How are they calculated in SPSS? How are these statistics interpreted?

**Session 21—April 5**

Examination on calculating and interpreting descriptive and bivariate statistics

**Session 22—April 10**

Theory of regression analysis

What is regression analysis? What are the fundamental assumptions on which regression analysis is built? What is a best fit line?


**Session 23—April 12**

Interpreting regression results

What information is provided by regression analysis? How can this information be retrieved from the output of regression analysis? How can regression results be interpreted for their substantive, as well as statistical, significance?

Janet Buttolph Johnson, H.T. Reynolds, and Jason D. Mycoff, Political Science Research Methods, Eighth Edition, Ch. 14

**Session 24—April 17**

Working session (multiple regression analysis)

How is multiple regression analysis conducted in SPSS? How is the output of SPSS regression analysis interpreted?

**Session 25—April 19**

Multiple regression analysis presentations, part 1

**Session 26—April 24**

Multiple regression analysis presentations, part 2

**Session 27—April 26**
Do school vouchers work?

What are school vouchers? In what ways can the scope and methods of political science provide insight into the efficacy of vouchers in enhancing student achievement, parental satisfaction, and other educational outcomes?

Jonathan N. Mills and Patrick J. Wolf, “The Effects of the Louisiana Scholarship Program on Student Achievement after Three Years”