

## **GOVT 301: Research Methods**

Spring 2012

Classroom: Morton 39

Professor: Mark T. Buntaine

Office Hours: Wednesday 10-12 or Thursday 1:30-3 (Morton 13)

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### **Overview**

In this course, we will learn about and implement the tools that political scientists use to do research. One of the most exciting and useful set of skills that you can gain is the ability to explore the frontier of our knowledge about the world and address questions that do not presently have good answers. Never has the time for gaining good research skills been more opportune. The amount of digitized data available to address almost any question about political and social life exceeds what was available just a few years ago by orders of magnitude. Knowing how to collect, organize and analyze data in ways that produce convincing and valid answers about pressing political, social, and economic problems is a highly prized skill across many different settings.

Learning to do research is not an arm's length process and it is not easy. In this course, you will be required to formulate your own questions, collect your own data, and analyze those data using tools and techniques that we will discuss. Everything that you read and that we cover in class meetings will inform the research project that you develop over the course of the semester. By the end of this course, you will have gained experience implementing basic research skills and will be ready to pursue more advanced research topics in other courses or on your own.

### **Student Evaluation**

Class Participation	15%
Preliminary Literature Review (Due: 2/17)	15%
Qualitative Data Exercise (Due: 3/16)	20%
Quantitative Data Exercise (Due: 4/20)	20%
Final Research Proposal (Due: 5/7)	30%

I take student evaluation very seriously and do not entertain requests to re-grade assignments unless I have made a technical mistake (adding scores incorrectly) or I receive a formal, written request for a re-grade that compellingly documents a serious oversight on my part. A serious oversight on my part indicates that the entire assignment should receive further attention. Your final score may go up or down if I decide that an assignment needs re-grading, so plan accordingly. That being said, I strongly encourage you to meet with me during office hours to discuss the substance of my comments about your assignments. I will provide you with comments on your literature review and data exercises so that you can improve them for inclusion in your final research proposal.

### **Required Text**

Kellstedt, P.M. and Whitten, G.D. 2009. *The Fundamentals of Political Science Research*. Cambridge: Cambridge University Press.

## **Contacting Me**

I encourage you to come talk to me about the course and your research project during my office hours or by making an appointment. In addition to class time and office hours, I endeavor to be accessible to you by email, but I am not always online. In general, I will try to respond to any email that I receive within 24 hours (48 hours over the weekend). That means that you should not wait until the last minute to ask questions about assignments. In some cases, I may suggest that we meet face to face to discuss issues that are difficult to address in an email.

## **Academic Honesty**

It is my expectation that you will adhere to the highest standards of academic honesty. This means only turning in work that is your own and properly citing all information and ideas that you draw from others. For more information on citation requirements in general, visit this very good set of library guides, borrowed from Duke University: <http://library.duke.edu/research/plagiarism/>

I will assign a failing grade for assignments that do not have proper citations. For overt plagiarism and other cases of academic dishonesty, I will refer the case to the Dean of Students. That being said, I encourage you to work together as groups to find, organize, and analyze the data for your projects. While every person is required to turn in their own literature review and data exercises, helping each other through the challenges involved with research will benefit everyone.

## **Unit I. RESEARCH AND THE SCIENTIFIC PROCESS**

### **January 18 – Introduction: What is the Science in Political Science?**

### **January 20 – Thinking Scientifically**

Kellstedt and Whitten, Chapter 1

Smith, R.M. 2002. Should We Make Political Science More of a Science or More about Politics? *Political Science and Politics* 35(2): 199-201.

### **January 25 – Thinking Theoretically**

Kellstedt and Whitten, Chapter 2, p. 22-31

King, Keohane, Verba. 1994. Rules for Constructing Causal Theories. In *Designing Social Inquiry*, p. 99-114. [Blackboard]

### **January 27 – NO CLASS, PEIO Conference**

Assignment: post a research question and hypothesis on Blackboard; make suggestions about at least three other sets of questions / hypotheses (see specific instructions on Blackboard).

### **February 1 – Using Library Resources for a Literature Review**

Knopf, J.W. (2006) "Doing a literature review" *Political Science and Politics* vol. 39, no. 1 (2006): 127-132.

Meeting: we will be meeting at Swem Library Learning Center (Room 134)

Assignment: come prepared with a revised question and hypothesis based on the Blackboard discussion

### **February 3 - Literature Review**

Read one:

Wright, J. and Winters, M. 2010. The Politics of Effective Foreign Aid. *Annual Review of Political Science* 13: 61-80. [International Political Economy]

Gandhi, J. and Lust-Okar, E. 2009. Elections Under Authoritarianism. *Annual Review of Political Science* 12: 403-422. [Comparative Politics]

Howell, W.G. 2011. Presidential Power in War. *Annual Review of Political Science* 14: 89–105. [American Politics]

### **February 8 – Evaluating Causality**

Kellstedt and Whitten, Chapter 3

### **February 10 – The Logic of Control**

Kellstedt and Whitten, Chapter 4, p. 67-76

### **February 15 – Challenges of Observational Research**

Kellstedt and Whitten, Chapter 4, p. 77-84

Green, D. P. (2005). On Evidence-Based Political Science. *Daedalus*, 134(3), 96-100.

## **Unit II. QUALITATIVE RESEARCH SKILLS IN POLITICAL SCIENCE**

### **February 17 – Case Studies**

Gerring, J. 2004. What Is a Case Study and What Is It Good For? *American Political Science Review*, 98(02), 341-354.

***Due: Preliminary Literature Review, February 17 by Start of Class***

### **February 22 – Case Selection**

Collier, D., & Mahoney, J. 1996. Insights and Pitfalls: Selection Bias in Qualitative Research. *World Politics*, 49(01), 56-91.

Geddes, B. 1990. How the Cases You Choose Affect the Answers You Get: Selection Bias in Comparative Politics. *Political Analysis*, 2(1), 131-150.

## **February 24 – Examples of Case Selection**

Seawright, J., & Gerring, J. 2008. Case Selection Techniques in Case Study Research. *Political Research Quarterly*, 61(2), 294-308.

### Read One:

Snyder, J., & Borghard, E. D. 2011. The Cost of Empty Threats: A Penny, Not a Pound. *American Political Science Review*, 105(03), 437-456. [International Relations]

Posner, D. N. 2004. The Political Salience of Cultural Difference: Why Chewas and Tumbukas Are Allies in Zambia and Adversaries in Malawi. *American Political Science Review*, 98(04), 529-545. [Comparative Politics]

Soss, J. & Schram, S.F. 2007. A Public Transformed? Welfare Reform as Policy Feedback. *American Political Science Review* 101(1): 111-127. [American Politics]

## **February 29 – Process Tracing**

Checkel, J.T. 2006. Tracing Causal Mechanisms. *International Studies Review* 8(2): 362-370.

Bennett, A., & Elman, C. 2006. Qualitative Research: Recent Developments in Case Study Methods. *Annual Review of Political Science*, 9(1), 455-476.

## **March 2 – Interview Methods**

Goldstein, K. 2002. Getting in the Door: Sampling and Completing Elite Interviews. *Political Science and Politics*, 35(4), 669-672.

Leech, B. L. 2002. Asking Questions: Techniques for Semistructured Interviews. *Political Science and Politics*, 35(4), 665-668.

## **Unit III. QUANTITATIVE RESEARCH SKILLS IN POLITICAL SCIENCE**

### **March 14 – Describing Quantitative Data**

Kellstedt and Whitten, Chapter 6

Assignment: Post a link to an article in political science that describes data well and write a paragraph explaining why. Post a link to another article that does not describe data well and write a paragraph about what the author could do differently.

### **March 16 - Finding Quantitative Data**

Meeting: we will be meeting at Swem Library Learning Center (Room 134)

***Due: Qualitative Data Exercise, March 16 by Start of Class***

### **March 21/23 – Introduction to Probability**

Kellstedt and Whitten, Chapter 7

### **March 28 – Bivariate Hypothesis Testing: Cross-Tabs and Chi-Squared**

Kellstedt and Whitten, Chapter 8, p. 134-145

Assignment: find a source of cross-tabular data and bring it to class

### **March 30 – Bivariate Hypothesis Testing: Difference of Means**

Kellstedt and Whitten, Chapter 8, p. 145-150

Assignment: find a source data that has the same measure for units of two different groups

### **April 4 – Bivariate Hypothesis Testing: Correlation**

Kellstedt and Whitten, Chapter 8, p. 150-157

Assignment: find a source of data that has two variables for the same units

### **April 6 – Catch-up Day**

### **April 11/13 – Bivariate Linear Regression**

Kellstedt and Whitten, Chapter 9

## **Unit IV: PREVIEW OF ADVANCED QUANTITATIVE RESEARCH SKILLS**

### **April 18 – Multivariate Linear Regression**

Kellstedt and Whitten, Chapter 10

Assignment: post a link to a article in political science that interests you and uses multiple regression.

### **April 20 – Survey Methods**

Johnson, J.B. and Reynolds, H.T. 2011. *Political Science Research Methods*, 7th Edition. Washington, D.C.: CQ Press, Ch. 10. [Blackboard]

Harbridge, L., & Malhotra, N. (2011). Electoral Incentives and Partisan Conflict in Congress: Evidence from Survey Experiments. *American Journal of Political Science*, 55(3), 494-510.

***Due: Quantitative Data Exercise, Friday, April 20 by Start of Class***

### **April 25 – Experiments and Randomized-Controlled Trials**

Green, D. P., & Gerber, A. S. 2003. The Underprovision of Experiments in Political Science. *The ANNALS of the American Academy of Political and Social Science*, 589(1), 94-112.

Humphreys, M. and Weinstein, J.M. 2009. Field Experiments and the Political Economy of Development. *Annual Review of Political Science* 12: 367-378. [International Political Economy]

***Due: Final Research Proposal, May 7 at noon***

## Preliminary Literature Review

In this assignment, you will search the scholarly literature to find out how different researchers have approached your question theoretically and what empirical results about your question already exist.

The goal of a literature review is to identify the frontier of our knowledge – the point where we can no longer confidently answer the questions that interest us. This might happen either because existing theories need to be refined or because sufficient empirical evidence is not available. A good literature review is more than a report about what other researchers have found; it is a critical review of existing research that points out what additional research is needed. The literature review will set up the rest of your research project by highlighting how it will move us beyond the current frontier of knowledge. A literature review can suggest a number of pathways to improved knowledge, for example:

1. Apply new data or methods to a previously unresolved question.
2. Identify a follow-up question to existing research.
3. Replicate an existing finding with new data to increase confidence in the result.
4. Identify conditions where an argument of another researcher does not hold.
5. Propose an alternative explanation for an existing empirical findings and test the observable implications on new data.
6. Identify an important theoretical or empirical question past researchers have overlooked.
7. ...and many others.

One of the primary challenges of a literature review is to make sure that you have accounted for all of the existing research on your question. You do not want to find later that someone has already done the same research. Thus, it is important to search widely for relevant research related to your question. In this assignment, you should use at least **three** databases (Google Scholar, Proquest, Web of Science, LexisNexis, etc.) to identify **twenty** articles or books that are relevant to your question. Make sure to search for both past and recent research. If you find an article or book that is directly relevant to your question, it often makes sense to look through articles that are cited in its bibliography.

You will probably skim/read many more articles than you will eventually include in your literature review. You need to narrow down your list to those articles that are most relevant and help you to identify the frontier of knowledge about your question. After you narrow to the twenty most relevant citations, you should read them and form an argument about how existing research is insufficient to answer your questions. If you do this well, the motivation for your research project will be very clear. The literature review that you turn in should be between 6-8 double-space pages.

## Qualitative Data Exercise

In this assignment, you will collect and analyze primary qualitative data to use within a case study research design. The case study or case studies that you choose should help you to answer your question. You need to explicitly justify the case design and case selection strategy that you choose, keeping in mind our classroom discussions and readings about case study research.

At this point in the semester, you will have developed a good question and reviewed out how other researchers have addressed that question. In this exercise, you will have to present your own theory that links your dependent variable to independent variables of interest. In doing so, you will want to generate as many *observable implications* as possible that are suggested by your theory. In other words, if your theory is correct what are all the things that we should observe over the course of the event that you are studying as a case. The major advantage of case study research designs is that you have the possibility to develop many observations about a single unit of analysis.

You can locate qualitative data to construct case studies from a variety of sources:

1. Newspaper articles.
2. Transcripts of speeches / interviews.
3. Reports and other written materials produced by organizations.
4. Videos of political events.
5. Many, many, many more (basically anything that offers accurate facts about a historical event).

The written report of your case study should be between 6-8 double-spaced pages and include the following components:

1. Present a theory that links independent variables to your dependent variable (~ 1 page)
2. Derive as many observable implications as possible from your theory (~ 1 page)
3. Discuss how the way you selected your case(s) allows you to test your hypotheses and observable implications in ways that will produce valid conclusions (~ 1 page)
4. Present your case(s) in light of the observable implications that you derive (~ 5 pages)

## Quantitative Data Exercise

In this assignment, you will collect and analyze primary quantitative data related to your research question. The goal of this assignment is to analyze the relationship between your dependent variable and an independent variable suggested by your theory. You are responsible for finding quantitative data, but we will discuss a wide variety of data sources during our library session and in the classroom. You should present descriptive information about your data in a way that helps your audience understand what it is you have collected and how it is distributed.

In terms of data analysis, you will be required to use **two** of the bivariate hypothesis tests that we discussed in Unit III of this course. That means that you will need to find units of interest that have measures for your dependent variable and at least **two** other variables. For both statistical techniques, you will (1) discuss why the variables should be related, as predicted by your theory, (2) explain the statistical test that you use to examine the relationship between your variable and the dependent variable; (3) explain whether the relationship is statistically significant, and (4) discuss how confidently you are able to reject the null hypothesis and why.

The written assignment that you turn in should have the following components:

1. A re-statement of your theory that is linked to testable hypotheses (~2 pages)
2. At least two figures that show the distributions of your dependent and independent variables (~ 2 pages).
3. An explanation of the statistical tests you will use and a justification about why they are appropriate (~ 1 page).
4. A discussion of the results of your statistical tests and an explanation about why they are or are not statistically significant (~2 pages)

In addition to the written report that you turn in about your quantitative data exercise, you should also provide the organized data and statistical code that you used to arrive at your answers, so that I can check that you have used the statistical techniques properly.

## Final Research Proposal

The final research proposal is a polished combination of the previous assignments, which clearly lays out the follow-up research that is needed to answer your question and your plan for doing it. The research proposal should be 15-20 double-spaced pages, not including your bibliography. You will want to use the comments that I gave you on previous work to present an improved research design.

Your research proposal should have the following components:

1. An introduction of your question, including background information about why it is important and why the proposal reader should care about the answer. The goal of a good introduction is to “hook” the reader so that they are very interested in what you will find. You should foreshadow your basic research design in the introduction (~ 2 pages).
2. A revised literature review that outlines what other researchers have done related to your question. Like the first version of your literature review, this section should clearly document why your research is at the frontier of our knowledge. (~ 5 pages).
3. Presentation of the theory and testable hypotheses. You should define all the concepts and variables that you use (~ 3 pages).
4. Presentation of the initial analysis you have done related to your question. Here you should pick your strongest evidence you have from either your qualitative or quantitative data exercise that illustrates the potential relationship between your independent and dependent variable (~2 pages).
5. Exposition of a research design that you could implement in the future that would allow you to make valid conclusions about your question. You should set up a design that allows you to rule out alternative explanations of your phenomenon of interest. You can propose a strategy to collect data that is not currently available and/or use data analysis techniques that have not previously been applied. You are free to use any research design or data analysis techniques that can help answer your question (~ 6 pages).
6. Discuss the implications of any findings that might come out of your research design and address any likely concerns about your research design (~ 2 pages).

Your research proposal should outline a research design that would be feasible to carry out as a seminar project or honors thesis. It is my hope that some of you will be able to implement your research designs in later semesters.

You should write as clearly as possible, present your research design in a succinct way, and avoid jargon. As always, citations are a requirement. I suggest that you form small groups and have other students read drafts of your proposal. I will also be available to read and discuss drafts of the final proposal, but only if they are sent to me **at least one week** prior to the due date.