PSC 208W: Undergraduate Research Seminar

University of Rochester
Spring 2016
Thursdays, 2:00-4:40pm
Classroom: LeChase Hall 182

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General Information
Broadly, the goal of this course is to teach students how to analyze and evaluate the social world from a scientific perspective. More specifically, this course will teach students how to write a social science research paper and provide students with the opportunity to write a small-scale individual or joint research project. Throughout the course we will cover topics such as framing an original social science research question, how to find data, conducting rigorous empirical analysis, and organizing/writing a research paper.

The best way to learn how to conduct social science research is to write a social science research paper. To develop students' projects, we will read and analyze good examples of research from political science and related disciplines. We will encounter different methods and different data for answering political questions and learn the advantages and disadvantages of each. We will focus on the intuition behind these approaches and leave the more technical aspects aside.

Who should and should not take this class?
This class requires you to complete an original research project on a topic chosen jointly between the students and the instructor. Therefore, you should be interested in doing research in political science, broadly defined. The more political science courses taken in the past, the better. The final research project is a significant undertaking and will require a good deal of your attention, especially in the second half of term. One of the prerequisites for this course is knowledge of basic statistics and data analysis. For example, students should be familiar with the basics of fitting a regression model to data and how to interpret a confidence interval. Students will ideally have taken a prior or are taking a coincident course in quantitative analysis. Knowledge of these topics is important because the articles we read and your research project will rely heavily on quantitative-based arguments.

Readings and software

All the readings will be uploaded to the course website. Although there are no required texts, the following book may be helpful because it reviews basic statistics and regression techniques in an intuitive manner:

Freedman, David, Robert Pisani, and Roger Purves. 1997. *Statistics, Third Edition*. New York: W. W. Norton and Co.

Although there is a newer fourth edition, I list the third edition because it is cheaper used on Amazon. The material in Sections III, V, and VIII is particularly pertinent for this course.

The lectures in the first part of the semester will teach students the basics of the statistical package STATA. Although it is not required for students to purchase a personal STATA license, the examples presented in class may be easier to follow for students able to implement the code on their own during class. Additionally, students may find it more convenient to have STATA on their computer rather than to have to go to the library to complete the handful of assignments that will require STATA, or to conduct the data analysis for their project. The one-year student site license is somewhat expensive, at $125, although this price may appear more reasonable when thinking about STATA as a textbook and considering that there are no texts required for the course. The UR IT site (http://tech.rochester.edu/software/stata/) links students to the following website to purchase the software:
http://www.stata.com/order/new/edu/gradplans/campus-gradplan/.

Grading
- **30% Written assignments:** There will be a series of short papers written in response to the reading in advance of class meetings, as well as written assignments later in the semester to complement writing the final paper.
- **20% Class participation:** Your participation grade will depend on your attendance, substantive contributions to the discussion, and your presentations. Note that speaking in class does not necessarily mean you have contributed to the discussion.
- **50% Final paper:** Developing the research paper is the primary objective of the course and will constitute the bulk of the work in the second half of the term. This will be roughly a 15-page social science paper that identifies an empirical or theoretical puzzle in the literature, lays out a research design to solve this puzzle, and brings data analysis to bear on the question. You will be graded on how your work draws on and extends previous research, the originality of your hypotheses, the appropriateness of the data you either collect or use, the skill with which you analyze the data, and all aspects of the writing.

Submitting assignments and late policy
All written assignments for class are due via email by 8pm on the Wednesday *before* the class for which they are assigned. For example, the written assignment for the January 21 class is due at 8pm on January 20. This will give me a chance to read the assignments prior to class and to tailor the discussion accordingly. Assignments handed in after 8pm but before midnight will be given half credit (although each student gets one mulligan per semester with regard to missing the 8pm deadline but getting the assignment in before midnight), and assignments handed in after midnight will not be accepted (no mulligans). Additionally, all readings are to be completed prior to the class for which they are assigned.

Attendance
This course will move somewhat quickly and attendance is required at all sessions. Please notify me of any known and unavoidable absences (e.g., University-sponsored academic or sporting event) at the beginning of the semester, and any unforeseen circumstances (e.g., death in the family, illness) as soon as possible as they arise. I understand that things happen, but you are expected to be responsible and to keep me informed.

Collaboration
You may work on the final papers either individually or as a joint endeavor. No matter what, you will be expected to complete all aspects of the project. In almost all circumstances, all members of a joint project will be assigned the same grade on the final paper. Unless otherwise indicated, all other assignments are to be completed individually.

What constitutes an acceptable final project?
You will receive additional ideas and details as the semester proceeds. However, to start, the following suggestions may be helpful (listed in no particular order):
- Collect and analyze an original (observational) dataset.
- Conduct and analyze the results of an experiment.
- Using an existing dataset: test a new hypothesis, alter the research design, and/or otherwise alter an important component of existing studies that have used the dataset.

Schedule of classes

Part I. Consuming social science research

January 14 – Asking and evaluating social scientific questions

Reading
- Read the syllabus for this course.
- Friedman, Thomas L. 2006. "The First Law of Petropolitics." *Foreign Policy* (May/June): 28-36.
- Ross, Michael L. 2001. "Does Oil Hinder Democracy?" *World Politics* 53(3): 325-361.
- Stephen Haber and Victor Menaldo. 2011. "Do Natural Resources Fuel Authoritarianism? A Reappraisal of the Resource Curse." *American Political Science Review* 105(1): 1-26.
    - Read from the beginning and stop when you reach the paragraph on pg. 11 that begins with "Country-by-country Time Series Analysis."
    - NB: Haber and Menaldo (2011) is highly technical and I do not expect you to understand the details of their statistical analysis. Instead—and this goes for Ross (2001) as well—I want you to try to understand the main arguments and how they use statistical evidence to support their arguments.

Assignment: Although it will be helpful to take notes on the following questions prior to class, there is no written assignment due.

Issues to think about while reading: What is the key question that each article attempts to answer? What are the main independent and dependent variables in each? What type of evidence do you find most convincing, and why? What type of evidence do you find least convincing, and why? In what ways does Ross' (2001) evidence differ from Friedman's (2006) and from Haber and Menaldo's (2011) evidence? Which regression table in Ross (2001) contains the main findings from that article?

January 21 – Experiments and thinking about causal relationships
Reading:
- Gerber, Alan S. and Donald P. Green. 2000. "The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment." *American Political Science Review* 94(3): 653-663.
- Redlawsk, David P., Caroline J. Tolbert, and William Franko. 2010. "Voters, Emotions, and Race in 2008: Obama as the First Black President." *Political Research Quarterly*, 63(4): 875-889.
- Habyarimana, James, Macartan Humphreys, Daniel N. Posner, and Jeremy M. Weinstein. 2007. "Why Does Ethnic Diversity Undermine Public Goods Provision?" *American Political Science Review* 101(4): 709-725.
- Tomz, Michael. 2007. "Domestic Audience Costs in International Relations: An Experimental Approach." *International Organization* 61(4): 821-840.

Assignment: Write a short response (approximately 300 words) that answers all of the following questions:

- In each article, which variable is randomly assigned by the experimenter? Which regression table conveys the main results? No additional explanation is required for these questions.
- In your opinion, for which article does the evidence most convincingly support the hypothesis? Please explain in one paragraph.
- In your opinion, for which article does the evidence least convincingly support the hypothesis? Please explain in one paragraph.
- Based on reading these articles, what are the main virtues of testing a hypothesis with experimentally generated data? What are the main drawbacks? Write one or two paragraphs on these questions that use specific examples from the articles.

January 28 – "Natural" experiments and historical data

Reading:

- Jason Lyall. 2010. "Are coethnics more effective counterinsurgents? Evidence from the Second Chechen War." *American Political Science Review* 104(1): 1-20.
- Hyde, Susan D. 2007 "The Observer Effect in International Politics: Evidence from a Natural Experiment." *World Politics* 60(1): 37-63.
- Nunn, Nathan. 2008. "The Long-term Effects of Africa's Slave Trades." *Quarterly Journal of Economics* 123(1): 139-176.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91(5): 1369-1401.

Assignment: Write a short response (approximately 300 words) that answers all of the following questions:

- In each article, which variable does the author wish they could have randomly assigned? Which regression table conveys the main results? No additional explanation is required for these questions.
- In your opinion, for which article does the evidence most convincingly support the hypothesis? Please explain in one paragraph.
- In your opinion, for which article does the evidence least convincingly support the hypothesis? Please explain in one paragraph.
- Based on reading these articles, what are the main virtues of testing a hypothesis with "natural" experimentally generated data? What are the main drawbacks? Write one or two paragraphs on these questions that use specific examples from the articles.

February 4 – Observational studies with a temporal component

Reading:
- Ladd, Jonathan McDonald and Gabriel S. Lenz. 2009. "Exploiting a rare communication shift to document the persuasive power of the news media." *American Journal of Political Science* 53(2): 394-410.
- Wand, Jonathan N., Kenneth W. Shotts, Jasjeet S. Sekhon, Walter R. Mebane, Jr., Michael C. Herron, and Henry E. Brady. 2001. "The Butterfly Did It: The Aberrant Vote for Buchanan in Palm Beach County." *American Political Science Review* 95(4): 793-810.
- Liou, Yu-Ming and Paul Musgrave. 2014. "Refining the Oil Curse: Country-Level Evidence From Exogenous Variations in Resource Income." *Comparative Political Studies* 47(11): 1584-1610.
- Cotet, Anca M. and Kevin K. Tsui. 2013. "Oil and Conflict: What Does the Cross Country Evidence Really Show?" *American Economic Journal: Macroeconomics* 5(1): 49-80.

Assignment: Write a short response (approximately 300 words) that answers all of the following questions:
- In each article, which variable does the author wish they could have randomly assigned? Which regression table conveys the main results? No additional explanation is required for these questions.
- In your opinion, for which article does the evidence most convincingly support the hypothesis? Please explain in one paragraph.
- In your opinion, for which article does the evidence least convincingly support the hypothesis? Please explain in one paragraph.
- Based on reading these articles, what are the main virtues of testing a hypothesis with time-series data? What are the main drawbacks? Write one or two paragraphs on these questions that use specific examples from the articles.

February 11 – Odds and ends with observational studies
Reading:
- Dunning, Thad. 2008. *Crude Democracy: Natural Resource Wealth and Political Regimes.* New York: Cambridge University Press.
  - Only read chapter 5, the case study on Venezuela.
- Paine, Jack. 2016. "Rethinking the Conflict Resource Curse: Why Oil Wealth Prevents Center-Seeking Civil Wars." *International Organization*, forthcoming.
  - You will only read the introductory and the statistical analysis sections. Exact pages TBD.
- Carter, David B. and H. E. Goemans. 2011. "The Making of the Territorial Order: New Borders and the Emergence of Interstate Conflict." *International Organization* 65(2): 275-309.
- King, Gary, Jennifer Pan, and Margaret E. Roberts. 2013. "How Censorship in China Allows Government Criticism but Silences Collective Expression." *American Political Science Review* 107(2): 326-343.

Assignment: Write a short response (approximately 300 words) that answers all of the following questions:

- In each article, which variable does the author wish they could have randomly assigned? Which regression table conveys the main results? No additional explanation is required for these questions.
- In your opinion, for which article does the evidence most convincingly support the hypothesis? Please explain in one paragraph. (You cannot choose my article.)
- In your opinion, for which article does the evidence least convincingly support the hypothesis? Please explain in one paragraph. (You can choose my article.)
- Based on reading these articles, what are the main virtues of testing a hypothesis with observational data? What are the main drawbacks? Write one or two paragraphs on these questions that use specific examples from the articles.

Part II. From consuming to producing social science research

Feb. 18 – Initial project discussion

Assignment: Write a short description (no more than 500 words) of at least two possible projects that you (alone or as a group) might undertake. Discuss datasets you may use. Additionally, read others' proposals and be prepared to discuss them in class.

February 25, March 3 – Presentations of published research (2 weeks)

Assignment: Over the course of these two classes, each student will deliver one 10- to 15- minute presentation of a published political science article, followed by a brief Q&A session for each presentation. The article will be chosen in advance by consulting with myself, and guidelines for the presentation will be send out beforehand. The students will also replicate at least one table or figure from their article and write a brief (~1 page) summary of their findings from the replication exercise. Finally, the students are expected to read some of and to think of possible questions for the articles presented by other students: 1 other presented article on the day you present, 3 other presented articles on the day you do not present.

March 10 – No class. Enjoy spring break . . . and think about your research project

March 17 - Summarize research, literature review

Assignments:
1. Hand in a brief (~1 page) statement about tentative plans for your final research project. Insofar as possible, this should identify: (a) the topic of your research; (b) the specific data you intend to work with; (c) how you will begin the analysis. With respect to (c), be as specific as possible. Saying "I will look for patterns in the data" or "I will look for relevant literature" is not satisfactory.
2. Hand in a literature review of work related to your topic. This should be 2-3 pages plus a list of references.

Part III. Producing Social Science Research
NB: I am intentionally leaving flexibility in the last part of the semester to tailor the classes according to what appears to be most helpful given the state of the students' research projects. I will provide additional details on the assignments as the dates draw nearer.

March 24 – How to organize a research paper
Assignment: TBD

March 31 – Outline of the papers
Assignment: Hand in an outline of your final paper.

April 7 – First partial draft
Assignment: Hand in a (short) first draft of your final paper.

April 14 – Tables and figures
Assignment: Prepare one table with statistical results from your paper to present to the class.

April 21 – Second partial draft
Assignment: Hand in a (somewhat longer) second draft of your final paper.

April 28 – No class
Assignment: Final paper due by midnight