# 17.850 Graduate Scope and Methods

Fall 2016 Thursday 10:00-12:00 Room E453-438

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Office Hours: Tuesday 1:30-2:30pm and by appointment

The world is full of fascinating stories, surprising events, and compelling puzzles. But how does curiosity about a compelling puzzle turn into a viable research project? The purpose of this course is to help you move from *topics* of interest to research *questions*, and to give you the skills necessary to answer those questions with solid, well-designed empirical research. The course will introduce you to the enterprise of scientific research in politics through methodological readings and examples of published research meant to highlight the strengths and weaknesses of various approaches. You will apply what you are learning by writing proposals for a major research project. You will emerge from this course not only a more sophisticated consumer of scholarly literature, but in a position to design and conduct your own independent scholarly research.

# **Course Requirements**

Participation: Class attendance and participation are essential to your learning, and mandatory. You should come to each week's class prepared to discuss the week's required readings. You do not have to read readings that are "recommended." I may reference them in class but they are primarily meant as an optional resource if you need to read further on a topic.

NSF Research Proposal: Learning to design original scholarly research is a central component of this course. You will therefore be required to prepare and submit an application to the National Science Foundation's Graduate Research Fellowship Program. Students will first submit a one-paragraph description of their proposed research topic on **September 22** followed by a rough draft of their application proposal (2 pages only) on **October 6**. Final drafts of the application (2 pages only) will be due by email on **October 20**, and the strict NSF deadline for applications is **October 29**, **8pm EST**. Finally, building on your proposal for the NSF application, you will submit a more detailed 15-page research proposal at the end of the course, on **December 8**.

Other Assignments: The best way to learn various research strategies is to apply them, so throughout the semester, you will complete short *research design assignments* applying individual approaches and methods. See the schedule for due-dates. Each research design assignment should present a plan for research on a topic of your choice (including the topic of your NSF proposal) that incorporates the approach or method assigned. These may be written in in paragraphs or bullet point form and need only contain information relevant to the design (no lit review, justification of importance). The design should be clear enough for me to evaluate the quality of the research that would result. I expect 1 or 2 pages.

# September 8: What is Research?

Sample NSF GRFP essays: Rachel Odell and Andy Halterman

Eidlin, Fred. "The Method of Problems versus the Method of Topics." *PS: Political Science and Politics* 44:04 (2011): 758-761.

A short but important piece on doing problem-driven research. While reading, take several topics you are interested in and formulate them as research puzzles. What are the distinguishing features of problem-driven research? It is currently in vogue in political science to identify oneself as doing "problem-driven" research, but will it always be this way? Eidlin seems to equate "method-driven" research with "topic-oriented" research, but is this true? Method-driven and data-driven research get a bad rap in modern political science but is this justified?

Almond, Gabriel and Stephen Genco. "Clouds, Clocks, and the Study of Politics." World Politics 29:4 (2007): 489-522.

A somewhat dated piece that responds to a set of debates surrounding behavioralism in political science by reviewing and building on some literature from the philosophy of science. What aspects of the philosophy of science is this article debating? What is the nature of causation in the social world? If the social world is more "cloud-like" or "clock-like," how might this affect the theories we develop and the methods we use to test them?

Bueno de Mesquita, Bruce. "The methodical study of politics." In *Problems and Methods in the Study of Politics* edited by Ian Shapiro, Rogers M. Smith and Tarek E. Masoud, 227-247. Cambridge University Press, 2004.

A chapter that describes a number of common approaches to political science research and discusses the strengths of each, with reference to applied examples. The first half presents a largely consensus view of mixed-method research, while the second half describes some of Bueno de Mesquita's more controversial claims about the ability to generate accurate predictions from calibrated formal models. What does Bueno de Mesquita see as the goal(s) of social science research and how does it compare to other readings? Is a predictive science of politics possible?

Mayhew, David. "Robert A. Dahl: questions, concepts, proving it." Journal of Political Power, 8:2 (2015): 175-187.

An easy read that describes how Robert Dahl, one of the foremost political scientists of his generation, managed to be so remarkably successful at designing good research. As you read, pick a few puzzles that interest you and try think of lead-in questions you might use to frame your research. What role did Dahl's personal politics play in shaping his research? What role should personal politics play in research?

Fearon, James and David Laitin. "Ethnicity, Insurgency, and Civil War." American Political

<sup>&</sup>lt;sup>1</sup> For a summary of the history of behavioralism, see Dahl, Robert. "The Behavioral Approach in Political Science: Epitaph for a Monument to a Successful Protest." *American Political Science Review* 55:4 (1961): 763-772.

Science Review 97:1 (2003): 75-90.

Cederman, Lars-Erik and Luc Girardin. "Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies." *American Political Science Review* 101:1 (2007): 173-185.

Read Fearon and Laitin (2003) and Cederman and Girardin (2007) together and think about how they succeed or fail as pieces of research. What puzzles motivate this research and what are the lead-in questions that the authors use to frame their contributions? How are they in conversation? Where do they disagree, and what do we learn?

### September 15: Basics of hypothesis testing and causal inference

Campbell, Donald T., and Julian Stanley. Experimental and Quasi-Experimental Designs for Research 1-71. Belmont, CA: Wadsworth Publishing, 1963.

A classic text on research design.

Dunning, Thad. "Design-Based Inference: Beyond the Pitfalls of Regression Analysis?" In Rethinking Social Inquiry: Diverse Tools, Shared Standards, Brady, Henry and David Collier, 206-243. Lanham, Maryland: Rowman & Littlefield Publishers, Inc., 2010.

What are the key differences between "design-based" and "model-based" inference? What is it about a strong research design that makes the causal estimates from a study more credible?

Fearon, James. "Counterfactuals and Hypothesis Testing in Political Science." World Politics 43.2 (1991): 169-195.

Does all hypothesis testing rely on counterfactuals? What are the strengths and weakness of what Fearon calls the "counterfactual approach" vs. the "actual case approach?" Is Fearon right that inference relies on the same statistical principles whether the analyst has few cases or many?

#### Recommended:

King, Gary, Keohane, Robert and Sidney Verba. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton: Princeton University Press, 1994.

Brady, Henry and David Collier. *Rethinking Social Inquiry*. Lanham, Maryland: Rowman & Littlefield Publishers, Inc, 2010.

Gerring, John. "Methods." In *Social Science Methodology: A Criterial Framework*, 200-230. Cambridge: Cambridge University Press, 2001.

### September 22: Concepts and Measurement

-DUE: NSF Research Proposal Topic Paragraph-

Sartori, Giovanni. "Concept Misformation in Comparative Politics." *American Political Science Review* 64:4 (1970): 1033-1053.

Adcock, Robert and David Collier. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review* 95:3 (2001): 529-546.

Nisbett, Richard and Timothy DeCamp Wilson. "Telling More Than We Can Know: Verbal Reports on Mental Processes." *Psychological Review* 84:3 (1977): 231-260.

What are the implications of Nisbett and Wilson for measurement strategies that rely on asking people to self-report their behavior, attitudes, or motivations?

The remaining readings for the week focus on conceptualization and measurement of democracy. Read them in conversation with each other.

Collier, David and Steven Levitsky. 1997. "Democracy with Adjectives: Conceptual Innovation in Comparative Research." World Politics 49(3): 430

Marshall, Monte, Keith Jaggers and Ted Robert Gurr. 2011. "Polity IV Project: Dataset Users' Manual." Center for Systemic Peace: 1-29

This is the user manual for the Polity IV democracy data set — one of the most widely used data sets in political science.

Treier, S. and Jackman, S. "Democracy as a Latent Variable." *American Journal of Political Science*. 52:1 (2008): 201–217.

Seawright, Jason and David Collier. "Rival Strategies of Validation: Tools for Evaluating Measures of Democracy." *Comparative Political Studies* 47:1 (2014): 111-138.

### September 29: Case Selection and Case Studies

-DUE: Conceptualization and Measurement Research Design-

Ziblatt, Daniel. "Rethinking the Origins of Federalism: Puzzle, Theory, and Evidence from Nineteenth-Century Europe." *World Politics* 57:1 (2004): 70-98.

George, Alexander L. and Andrew Bennett. 2005. Case Studies and Theory Development in the Social Sciences. Cambridge, MA: MIT Press.

Seawright, Jason and John Gerring. "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options." *Political Research Quarterly* 61:2 (2008): 294-308.

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

Nielsen, Richard A. "Case Selection via Matching." *Sociological Methods and Research.* 45:3 (2016): 569-597.

#### Recommended:

Mill, John Stuart. 1872. A System of Logic, Ratiocinative and Inductive: Being a Connected View of the Principles of Evidence and the Methods of Scientific Investigation. London: Longmans, Green and Co. 8th edition.

Gerring, John. "The Case Study: What It Is and What It Does." In *The Oxford Handbook of Comparative Politics*, edited by Carles Boix and Susan C. Stokes, 90-122. Oxford: Oxford University Press, 2007.

Sekhon, Jasjeet. "The Neyman-Rubin Model of Causal Inference and Estimation via Matching Methods." In *The Oxford Handbook of Political Methodology*, edited by Janet M. Box-Sheffenmeiser, Henry Brady and David Collier, 271-299. Oxford: Oxford University Press, 2008.

Slater, Dan, and Daniel Ziblatt. 2013. "The Enduring Indispensability of the Controlled Comparison." *Comparative Political Studies*, 46(10): 1301-1327.

# October 6: Within-case "process tracing"

-DUE: NSF Research Proposal Draft-

Fairfield, Tasha. "Going Where the Money Is: Strategies for Taxing Economic Elites in Unequal Democracies." *World Development* 47 (2013): 42-57. **ALSO READ APPENDIX A** 

Bennett, Andrew, and Jeffrey T. Checkel. 2014. "Process Tracing: From Philosophical Roots to Best Practices," in *Process Tracing: From Metaphor to Analytic Tool.* Eds. Jeffrey T. Checkel and Andrew Bennett. Cambridge University Press (2014).

Waldner, David. 2014. "What Makes Process Tracing Good? Causal Mechanisms, Causal Inference, and the Completeness Standard in Comparative Politics," in *Process Tracing: From Metaphor to Analytic Tool.* Eds. Jeffrey T. Checkel and Andrew Bennett. Cambridge University Press (2014).

Collier, David. "Understanding Process Tracing." *PS: Political Science and Politics* 44:4 (2011): 823-30.

#### Recommended:

Bennett, Andrew. "Process Tracing and Causal Inference." In *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, Brady, Henry and David Collier, 207-220. Lanham, Maryland: Rowman & Littlefild Publishers, Inc., 2010.

Glynn, Adam and Kevin Quinn. "Why Process Matters for Causal Inference." *Political Analysis* 19 (2011): 273-286.

Van Evera, Stephen. "What Are Case Studies? How Should They Be Performed?" In *Guide to Methods for Students of Political Science*, 49-88. Ithaca: Cornell University Press, 1997.

### October 13: Large-N analysis of experimental data

-DUE: Case Selection and Process Tracing Research Design-

Berinsky, Adam and Donald Kinder. "Making Sense of Issues Through Media Frames: Understanding the Kosovo Crisis." *Journal of Politics* 68:3 (2006): 640-656

Habyarimana, James; Humphreys, Macartan; Posner, Daniel and Jeremy Weinstein. "Why Does Ethnic Diversity Undermine Public Goods Provision?" *American Political Science Review* 101:4 (2007): 709-725

Beath, Andrew; Fotini, Christia and Ruben Enikolopov. "Empowering Women through Development Aid: Evidence from a Field Experiment in Afghanistan." *American Political Science Review* 107:3 (2013): 540-557.

How would Campbell and Stanley classify the designs in these three experimental papers?

Simmons, Joseph; Nelson, Leif and Uri Simonsohn. "False-Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant." *Psychological Science* 22 (2011): 1359-1366.

Franco, Annie, Neil Malhotra, and Gabor Simonovits. 2015. "Underreporting in Political Science Survey Experiments: Comparing Questionnaires to Published Results." Political Analysis. 23(2): 306-312.

Given these methodological warnings, how much should we trust experimental results in political science? What could increase the credibility of published results?

#### Recommended:

Baldwin, Kate, and Rikhil Bhavnani. 2015. "Ancillary Studies of Experiments: Opportunities and Challenges," Journal of Globalization and Development, 6(1): 113:146

### October 20: Large-N analysis of observational data

- -DUE: Application Research Proposal-
- -DUE: Experimental Research Design-

Glynn, Adam and Maya Sen. (2014) "Identifying Judicial Empathy: Does Having Daughters Cause Judges to Rule for Womens Issues?" American Journal of Political Science. 59: 37-54

Nielsen, Richard A. et al. "Foreign Aid Shocks as a Cause of Violent Armed Conflict." *American Journal of Political Science* 55:2 (2011): 219-232.

Berinsky, Adam. "Assuming the Costs of War: Events, Elites, and American Public Support for Military Conflict." *Journal of Politics* 69:4 (2007): 975-997.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. "The Colonial Origins of

Comparative Development: An Empirical Investigation." *American Economic Review* 91:5 (2001): 1369-1401.

James E. Monogan III. 2015. "Research Preregistration in Political Science: The Case, Counterarguments, and a Response to Critiques." *PS: Political Science & Politics* 48(3):425-429.

Would preregistration solve problems with "p-hacking" (searching for significant results by estimating many statistical models but presenting only a few)? What are the benefits and downsides to preregistration of observational studies?

#### Recommended:

Findley, Michael G., Nathan M. Jensen, Edmund J. Malesky, and Thomas B. Pepinsky. 2016. "Can Results-Free Review Reduce Publication Bias? The Results and Implications of a Pilot Study," *Comparative Political Studies*.

# October 27: Interpretation and Ethnography

-DUE: Large-N Observational Data Research Design-

Autesserre, Severine. "The Defeat of Bottom-Up Solutions." In *The Trouble with the Congo: Local Violence and the Failure of International Peacebuilding*, 179-230. New York: Cambridge University Press, 2010.

Hawkesworth, Mary. "Congressional Enactments of Race-Gender: Toward a Theory of Raced-Gendered Institutions." *American Political Science Review* 97:4 (2003): 529-550.

Wedeen, Lisa. 2010. "Reflections on Ethnographic Work in Political Science." Annual Review of Political Science, 13: 255-272.

Pachirat, Timothy. "We Call It a Grain of Sand: The Interpretive Orientation and a Human Social Science," 426-432, in *Interpretation and Method: Empirical Research Methods and the Interpretive Turn (Second Edition)*, Eds. Dvora Yanow and Peregrine Schwartz-Shea. Armonk, NY: ME Sharpe, Inc., 2014.

For the following three readings, consider the following questions: What types of activities constitute the research process? How do the authors gather and analyze data? How do the authors reach conclusions and what evidence do they present to support these conclusions? What work is interpretation doing?

#### Recommended:

Menoret, Pascal. 2014. *Joyriding in Riyadh*. New York: Cambridge University Press. **Chapters 1 and 5.** 

### November 3: Combining methods

-DUE: Ethnography Research Design-

Tsai, Lily. "Temples and Churches in Rural China." In *Accountability Without Democracy*, 120-147. Cambridge: Cambridge University Press, 2007.

Approaches to combining methods.

Lieberman, Evan. "Nested Analysis as a Mixed-Method Strategy for Comparative Research." *American Political Science Review* 99(2005): 435-451.

Fearon, James and David Laitin. "Integrating Qualitative and Quantitative Research Methods." In *The Oxford Handbook of Political Methodology*, edited by Janet M. Box-Sheffenmeiser, Henry Brady and David Collier, 756-778. Oxford: Oxford University Press, 2008.

Dunning, Thad. "The Central Role of Qualitative Evidence," 208-232 in *Natural Experiments in the Social Sciences: A Design-Based Approach*. New York: Cambridge University Press, 2012.

Blattman, Christopher, Julian Jamison, Tricia Koroknay-Palicz, Katherine Rodrigues, Margaret Sheridan. 2016. "Measuring the measurement error: A method to qualitatively validate survey data," *Journal of Development Economics*, 120: 99-112.

The next set of readings questions whether mixed-method work should be awarded special status as more reliable, credible, or desirable.

Ahmed, Amel and Rudra Sil. "When Multi-Method Research Subverts Methodological Pluralism—or, Why We Still Need Single-Method Research." *Perspectives on Politics* 10.4 (2012): 935-953.

Gehlbach, Scott. 2015. "The Fallacy of Multiple Methods." APSA Comparative Politics Newsletter

#### Recommended:

Wawro, Gregory J. and Ira Katznelson. "Designing Historical Social Scientific Inquiry: How Parameter Heterogeneity Can Bridge the Methodological Divide between Quantitative and Qualitative Approaches." *American Journal of Political Science* 2013 (early edition).

#### November 10: Fieldwork

-DUE: Multi-method Research Design-

Wood, Elizabeth. 2007. "Field Research," In: Boix and Stokes (eds) *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press, 123-146.

A summary of what field research is and how it can make research from a variety of approaches stronger.

Menoret, Pascal. 2014. *Joyriding in Riyadh*. New York: Cambridge University Press. **Chapter 2.** 

This is a candid description of Menoret's experience attempting to "enter the field" in Saudi Arabia.

How is "entering the field" different from going to a place and visiting? How can you try to open doors to make your research possible? What will you do when your planned research is impossible to carry out?

Fujii, Lee Ann. 2015. Five Stories of Accidental Ethnography: Turning Unplanned Moments in the Field into Data. *Qualitative Research* 15(4). 525-539.

A personal account illustrating how unplanned moments in the field can be illuminating down the road. Can field workers plan "unplanned moments" in any way? How can you maximize your chances of having useful research observations while in the field? How important is planning for fieldwork if unplanned moments can be useful?

#### Recommended:

Hsueh, Roselyn, Francesca Refsum Jensenius and Akasemi Newsome. 2014. "Fieldwork in Political Science: Encountering Challenges and Crafting Solutions – Introduction," *PS: Political Science & Politics*, 47(2): 391-393.

#### November 17: Research Ethics and IRB

-DUE: Complete MIT COUHES training before the start of class.-

Is IRB about ethics? What are the purposes of getting IRB clearance for research?

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. 1979. The Belmont Report. <a href="http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html">http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html</a>

King, Gary, and Melissa Sands. Working Paper. "How Human Subjects Research Rules Mislead You and Your University, and What to Do About It." <a href="http://gking.harvard.edu/publications/while-human-subjects-training-teaches-you-law-it-misleads-you-about-politics-some">http://gking.harvard.edu/publications/while-human-subjects-training-teaches-you-law-it-misleads-you-about-politics-some</a>

Zechmeister, Elizabeth J. 2016. "Ethics and Research in Political Science," in *Ethics and Experiments*, Scott Desposato (ed). Routledge. 255-261.

What ethical responsibilities do researchers — especially experimental researchers — have?

Driscoll, Jesse. 2016. "Prison States and Games of Chicken," in *Ethics and Experiments*, Scott Desposato (ed). Routledge. 81-96.

Desposato, Scott. 2016. "Conclusions and Recommendations," in *Ethics and Experiments*, Scott Desposato (ed). Routledge. 267-289.

An example of what can go wrong with observational research:

McMurtrie, Beth. "Secrets from Belfast: How Boston College's oral history of the Troubles fell victim to an international murder investigation." *Chronicle of Higher Education*. 26 January

### 2014. http://chronicle.com/article/Secrets-from-Belfast/144059/

An example of what can go wrong with experimental research:

Wilis, Derek. "Professors' Research Project Stirs Political Outrage in Montana." New York Times. 28 October 2014. <a href="http://www.nytimes.com/2014/10/29/upshot/professors-research-project-stirs-political-outrage-in-montana.html?abt=0002&abg=1& r=0</a>

Blattman, Chris. "Is it ok for researchers to mess with elections?" 27 October 2014 <a href="http://chrisblattman.com/2014/10/27/ok-researchers-mess-experiments/">http://chrisblattman.com/2014/10/27/ok-researchers-mess-experiments/</a>

Patty, John. "Well, In a Worst Case Scenario, Your Treatment Works..." 27 October 2014 <a href="http://www.mathofpolitics.com/2014/10/27/well-in-a-worst-case-scenario-your-treatment-works/">http://www.mathofpolitics.com/2014/10/27/well-in-a-worst-case-scenario-your-treatment-works/</a>

### Recommended:

Nielsen, Richard. 2016. "Experimental Manipulation of Religion," in *Ethics and Experiments*, Scott Desposato (ed). Routledge. 42-65.

# December 1: Philosophy of Science

Popper, Karl. "A Survey of Some Fundamental Problems." In *The Logic of Scientific Discovery*, 1-26. New York: Routledge, 2002.

Kuhn, Thomas. The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 2012.

This is a classic work in the history of science with substantial implications for philosophy of science. Please read it carefully. What is normal science and what is a scientific revolution? Is political science a normal science or not? What is a paradigm and how is it created, sustained, and disrupted? Does political science have paradigms? What determines a good research question? What is the role of theory and evidence in science? How does science make progress?

Lakatos, Imre. "Falsification and the Methodology of Scientific Research Programmes", in *Can Theories be Refuted? Essays on the Duhem-Quine Thesis*, Sandra G. Harding (ed). Springer. 1976.

Fayerabend, Paul. 1975. Against Method. Read the annotated index and chapter 1.

### December 8: Political Science as a Profession

-DUE: 15-page Research Proposal-

For class discussion: As a professional political scientist, what are your ethical obligations to students (undergraduate and graduate), to colleagues, and the world?

Davis, Don. 2001. "PhD Thesis Research: Where Do I Start?" <a href="http://www.columbia.edu/~drd28/Thesis%20Research.pdf">http://www.columbia.edu/~drd28/Thesis%20Research.pdf</a>

Advice for navigating graduate school. This is written to economics PhD students but virtually all of the advice applies to political science.

Healy, Kieren. 2013. "Choosing Your Workflow Applications." <a href="http://kieranhealy.org/files/misc/workflow-apps.pdf">http://kieranhealy.org/files/misc/workflow-apps.pdf</a>

I don't agree with all of Healy's own preferred applications, but I agree that the first year of graduate school is a good time to make some decisions about how to structure your workflow. I'm happy to give workflow recommendations.

Hassner, Ron. 2008. "Trial by Fire: Surviving the Job Talk Q&A," PS: Political Science & Politics, 41(4): 803-808.

It may seem premature to start thinking about job talks, but it is not. If your goal is to become an academic political scientist, than your job talk will be the most crucial 90 minutes of your graduate student career. Start practicing giving good talks now.

Miller, Beth, Jon Pevehouse, Ron Rogowski, Dustin Tingley, and Rick Wilson. 2013. "How To Be a Peer Reviewer: A Guide for Recent and Soon-to-be PhDs," *PS: Political Science & Politics*, 46(1).

Packet of journal reviews and author responses (on course website).