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PoliSci 490
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Office Hours: By appointment

Experiments in Political Science

The rise of experiments is one of the most notable methodological developments in political science over the past decade. Scholars from every subfield now regularly turn to experiments. The recent penchant for experimentation means that political scientists face a variety of distinct epistemological and methodological challenges. The design, implementation, and analysis of experiments raise a number of issues that political scientists are not historically accustomed to addressing. This is particularly the case for political science due to the breadth of the discipline, the varying contexts in which experiments are implemented (e.g., laboratory, survey, field), and the distinct methods employed (e.g., psychological or economic approaches to experimentation). This class will review the challenges to experimentation and survey prominent applications. The class meets on Mondays from 2:00-4:30 in the Political Science Experimental Laboratory.

Students are expected to come to class prepared to discuss, in detail, *all of the assigned readings*. Students may be asked to present specific assigned readings *without* prior notice. In so doing, be prepared to discuss main themes, contributions, problems, and unanswered questions.

The first four class sessions will provide background and address general issues in the design and analysis of experiments. These class sessions will involve a mix of some lecture and significant discussion and thus students should come prepared. Most of the other classes will be structured around the chapters that will appear in the *Handbook of Experimental Political Science*. All class members will read the relevant Handbook chapters for a given week.

Additionally each student will be assigned a specific week of the course. For that week, the student will choose one or a few particular review papers and read significantly further on the topic. The student will write an approximately five to seven page paper that reviews the general literature in this area (which requires reading several of the primary sources cited in a given Handbook paper), and isolate areas in need of further inquiry. This paper must significantly move beyond the reading on which it is based (e.g., by delving into more detail on a focused question). The student will present this paper (approximately 10 minutes), and then lead class discussion not only on this specific topic but also all the topics covered that week. (If a given week has multiple students, labor will be divided by the instructor.) The student will further develop the paper by offering a basic theory, hypotheses, and an experimental design. This revised version will be due at the end of the quarter. (We also may invite some more advanced graduate students using experiments in their dissertations to present their work, at some point during the quarter.)

The other major task for the class is to work as a group on designing, implementing, and analyzing an experiment. The instructor will provide the topic and framework; work on this project will be over the entire quarter, and possibly beyond. Students will be given (and graded on) specific assignments such as reviewing literature, and offering possible

experimental designs. Students also will be evaluated for their contribution to the actual implementation.

The course grade will be determined as follows: class participation (25%), paper (50%), and the class project contribution (25%).

The readings from the Handbook are prefaced with the acronym HB. These will be made available by the instructor. The Johnson and Sahdish et al. books are available for purchase at the Norris bookstore. Other readings are either available from JSTOR or from the instructor. Finally, students are advised to obtain the following book (available at the Norris bookstore), read parts of it prior to the start of the class, and maintain it for reference through the class and beyond: Keppel, Geoffrey, and Thomas D. Wickens. 2004. *Design and Analysis: A Researcher's Handbook* (4th Edition). Upper Saddle River, NJ: Pearson/Prentice Hall.

Class 1, TBA. Experiments in Political Science

Johnson, George. 2008. *The Ten Most Beautiful Experiments*. New York: Alfred A. Knopf.

Druckman, James N., Donald P. Green, James H. Kuklinski, and Arthur Lupia. 2006. "The Growth and Development of Experimental Research Political Science." *American Political Science Review* 100: 627-635.

Morton, Rebecca M., and Kenneth C. Williams. 2008. "Experimentation in Political Science." In Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier, *The Oxford Handbook of Political Methodology*. New York: Oxford University Press.

Gerber, Alan S., and Donald P. Green. 2008. "Field Experiments and Natural Experiments." In Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier, *The Oxford Handbook of Political Methodology*. New York: Oxford University Press.

HB: Laboratory Experiments in Political Science, Shanto Iyengar

HB: The Logic of Survey Experiments, Paul Sniderman

HB: Field Experiments in Political Science, Alan Gerber

Look at <http://www.experimentcentral.org/> (Time Sharing Experiments for the Social Sciences).

Class 2, October 5. Causation, Experimentation, and Validity

Holland, Paul W. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association* 81: 945-960. (Skim subsequent commentaries.)

Field, Andy, and Graham Hole. 2003. *How To Design and Report Experiments*. London: Sage Publications, Chapter 3.

Shadish, William, R, Thomas D. Cook, and Donald T. Campbell. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inferences*. Boston: Houghton Mifflin. Chapters 1-3.

HB: Internal and External Validity, Rose McDermott

HB: Experimental Subjects, Jamie Druckman and Cindy Kam

HB: Deception and Monetary Incentives, Eric Dickson

Class 3, October 12. Political Economy/Game Theory Experiments

Danziger, Kurt. 2000. "Making Social Psychology Experimental: A Conceptual History, 1920-1970." *Journal of the History of the Behavioral Sciences* 36: 329-347.

Schelling, Thomas C. 1967. "What Is Game Theory?" In James C. Charlesworth (ed.), *Contemporary Political Analysis*. New York: Free Press.

Gibbons, Robert S. 1997. "An Introduction to Applicable Game Theory." *Journal of Economic Perspectives* 11: 127-149.

Smith, Vernon L. 1976. "Experimental Economics: Induced Value Theory." *American Economic Review* 66: 274-9.

Roth, Alvin E. 1995. "Introduction to Experimental Economics." In John H. Kagel, and Alvin E. Roth (eds.), *The Handbook of Experimental Economics*. Princeton, NJ: Princeton University Press. Pages 1-35.

Palfrey, Thomas R. 2009. "Laboratory Experiments in Political Economy." *Annual Review of Political Science* 12: 379-388.

Henrich, Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, and Richard McElreath. 2001. "In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies." *American Economic Review* 91: 73-79.

Bowles, Samuel, and Herbert Gintis. 2006. "Social Preferences, *Homo Economicus*, and *Zoon Politikon*." In Robert E. Goodin and Charles Tilly, eds., *The Oxford Handbook of Contextual Political Analysis*. Oxford: Oxford University Press.

Class 4, October 19. Ethics

Milgram, Stanley. 1963. "Behavioral Study of Obedience." *Journal of Abnormal and Social Psychology* 67: 371-378.

Zimbardo, Phillip. "A Pirandellian Prison," *New York Times Magazine* April 8, 1973.

"Don't Talk to The Humans: The Crackdown on Social Science Research," *Lingua Franca*, September 2000.

Singer, Eleanor, and Felice J. Levine. 2003. "Protection of Human Subjects of Research: Recent Developments and Future Prospects for the Social Sciences." *Public Opinion Quarterly* 67: 148-164.

See <http://www.research.northwestern.edu/oprs/irb/info/>

Class 5, October 26. Voting, Turnout, and Decision Making

HB: Mobilization, Melissa Michelson and David Nickerson

HB: Media Effects, Tom Nelson, Sarah M. Bryner, and Dustin Carnahan

HB: Candidate Advertisements, Shana Kushner Gadarian and Rick Lau

HB: Candidate Evaluations, Kathleen McGraw

HB: Implicit Political Attitudes, Milton Lodge and Charles Taber

HB: Knowledge, Cheryl Boudreau and Skip Lupia

HB: Attitude Change, Allyson Holbrook

Class 6, November 2. Inter-personal Relations and Race

HB: Social Trust, Rick Wilson and Catherine Eckel

HB: Deliberation, Chris Karpowitz and Tali Mendelberg

HB: Social Networks and Context, David Nickerson

HB: Identity, Darren Davis

HB: Prejudice, Vince Hutchings and Spencer Piston

HB: The Political World as Seen by Minority Group Members, Dennis Chong and Jane Junn

Class 7, November 9. Institutions and Bargaining

HB: Collective Action, Eric Coleman and Lin Ostrom

HB: Electoral Systems and Strategic Voting, Becky Morton and Ken Williams

HB: Legislative Voting and Cycling, Gary Miller

HB: Democratization and Development, Leonard Wantchekon and Ana L. De La O Torres

HB: Negotiations, Daniel Druckman

HB: Coalition Formation, Daniel Diermeier

HB: Foreign Policy Decision-Making, Peg Hermann and Binnur Ozkececi-Taner

Class 8, November 16. Advanced Methods and New Areas of Research

HB: Mediation, John Bullock and Shang Ha

HB: Treatment Effects, Brian Gaines and Jim Kuklinski

HB: Multi-level Contexts, Betsy Sinclair

HB: Covariates, Jake Bowers

HB: Downstream Benefits, Rachel Sondheimer

Phelps, Elizabeth A. and Laura A. Thomas. 2003. "Race, Behavior and the Brain: The Role of Neuroimaging in Understanding Complex Human Behaviors." *Political Psychology* 24: 747-758.

McClure, Samuel M., David I. Laibson, George Loewenstein, and Jonathan D. Cohen. 2004. "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science* 306:503-507.

McDermott, Rose,, Dustin Tingley, Jonathan Cowden, Giovanni Frazzetto, and Dominic D. P. Johnson. 2009. "Monoamine Oxidase: A Gene (MAOA) Predicts Behavioral Aggression Following Provocation." *Proceedings of the National Academy of Sciences* 106: 2118-2123.

Dickson, Eric, and Kenneth Scheve. 2005. "Testing the Effect of Social Identity Appeals in Election Campaigns: a Research Proposal." Unpublished paper, Yale University.

Class 9, November 23. Catch-up/Wrap-up.

Morton, Rebecca B. and Kenneth C. Williams. N.d. *From Nature to the Lab: The Methodology of Experimental Political Science and the Study of Causality*. New York: Cambridge University Press.