

POS 3930
Advanced Research Methods in Political Science
(for Undergraduate Students)
Tuesdays/Thursdays 2:00 to 3:15 PM
Fall 2011

Instructor: Dr. Jason Barabas [pronounced: bear-AH-bis]
Class Location: Pepper 263
Office: Pepper 238 or Bellamy 554
Office Hours: Thursdays 10-11 AM in Pepper 238 or by Appt.
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Website: www.jasonbarabas.com or Blackboard (Bb) Course Site

Course Description and Objectives:

This course introduces undergraduate students to quantitative research methods and analytical techniques. Upon completion of the course, students should be able to read empirical articles and conduct statistical analyses. Among other topics, this course will cover the basics of research questions and designs, threats to validity, hypothesis testing, and various types of regression models (e.g., ordinary least squares, logit, probit, Poisson). While studying these topics, students will be required to master some mathematical formulas and learn statistical software programs like Stata and R. However, despite the emphasis on statistics and data analysis, this is not primarily a course in mathematics. In this class, the main emphasis is on *applying* analytical techniques. So, instead of memorizing formulas, students will be encouraged to learn to apply that knowledge to the analysis of quantitative data.

Prerequisites: Most students enrolling in this course will have taken the main political science research course (POS 3713) and done well in it (i.e., earned an A- or higher). For many students, this course provides a glimpse of life as a graduate student in a quantitative political science program (or related programs in the social sciences such as Economics or Sociology). Anyone interested in enrolling in the course should be prepared to complete weekly homework problem sets, occasional quizzes, an oral presentation, and an empirical research term paper.

Helpful Reference Book:

- Kellstedt, Paul M., and Guy D. Whitten. 2009. *The Fundamentals of Political Science Research*. New York: Cambridge University Press.

Required Books:

- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: Sage. ISBN: 0-803907374-8
- Fox, John, and Sanford Weisberg. 2011. *An R Companion to Applied Regression*, 2nd Edition. Thousand Oaks: Sage.
- Long, J. Scott, and Jeremy Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata*. 2nd ed. College Station, TX: Stata Press. ISBN-13: 978-1597180115

Recommended Books for R & Stata:

- Adler, Joseph. 2011. *R in a Nutshell*. Sebastopol, CA: O'Reilly Media. ISBN-13: 978 - 0596801700
- Crawley, Michael J. 2005. *Statistics: An Introduction Using R*. Hoboken, NJ: John Wiley & Sons. ISBN-13: 978-0470022986
- Crawley, Michael J. 2007. *The R Book*. Hoboken, NJ: Wiley. ISBN-13: 978-0470510247
- Dalgaard, Peter. 2008. *Introductory Statistics with R*, 2nd ed. New York: Springer-Verlag. ISBN-13: 978-0387790534
- Long, J. Scott. 2009. *The Workflow of Data Analysis Using Stata*. College Station, TX: Stata Press. ISBN-13: 978-1-59718-047-4

Recommended Econometrics Books:

- Cameron, A. Colin, and Pravin K. Trivedi. 2005. *Microeconometrics*. New York: Cambridge University Press. ISBN: 978-0-521-847805-3
- Greene, William. 2012. *Econometric Analysis*. 7th edition. New York: Prentice Hall ISBN: 0-13-1395539-6
- Kennedy, Peter. 2008. *A Guide to Econometrics*, 6th ed. New York. Wiley. ISBN-13: 978-1405182577
- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*, 2nd Edition. Cambridge: MIT Press. ISBN: 978-0262232586
- Wooldridge, Jeffrey M. 2009. *Introductory Econometrics: A Modern Approach*, 4th ed. Mason, OH: South-Western Cengage Learning. ISBN-13: 978-0324581621

Grading:	% of Final Grade
Homework	30%
Project Proposal & Empirical Paper	40%
Exam	30%

Homework: Most weeks there will be homework assignments based on the techniques covered in class. These assignments will be made available each Tuesday and MUST be handed in by the next Friday of that same week at 6 pm (via Blackboard or sent directly to the teaching assistant if Bb is not working). Assignments handed in after this deadline will not be graded. You may work with other classmates on these assignments. However, I recommend that you do not work in large groups (i.e., >3). Each of you should write up your own answers and run any relevant computer code. Some homework assignments will ask you to critically evaluate how one of the techniques that we have learned is used in some article of interest to you; these problems should be done individually and not as a group. The assignments will vary in terms of length and point value.

Project Proposal & Empirical Paper: By the end of the semester you will be asked to write a paper in which you apply one or more of the techniques that you have learned. Ideally, your paper will go beyond the methods covered in the weekly homework assignments (i.e., do not simply add a variable to a model you estimated in one of the homework sets) and hopefully your paper will have the potential to be published one day. Most of the grade will be based upon the methods used, but it helps if there is a clear presentation of the literature and theory as well.

Given the time constraints involved at this stage of your graduate training, I am open to the possibility of you handing in a similar paper to one that you are writing for another class. In some instances, although more rarely, it is okay to collaborate on your final paper with someone else in the class, but get my approval first. However, to work on a project across classes or collaboratively you must first discuss this with me and, if applicable, get the permission of the other professor/person involved. Please note that I will take into account the fact that you are writing a paper for more than one class when grading it—I expect it to be of higher quality.

You should start thinking about a possible paper topic as early as possible in the semester. To facilitate this process—and to reinforce some of the early lectures on causality—I am asking you to prepare a two-part project proposal. Each project proposal should start with a page or less describing the phenomenon of interest. Then, part 1 outlines the best test of the theory you can think of in a few pages assuming you have access to resources of roughly \$500,000. Be ambitious and keep threats to validity, particularly threats to causal inference, firmly in mind as you attempt to make it the best study possible. The goal of this part of the assignment is to get you to think in terms of estimating causal effects. The second half of your proposal specifies what you plan to do for the course project due at the end of the course. In some instances the ideal situation (part 1) could be roughly the same as what you do in practice (part 2), but this is unlikely. The proposal will be due about a month before the end of class and the final paper will be due during exam week.

Exam: The exam will be similar to the proposal and paper assignment, but the topic(s) will be unknown ahead of time. That is (pending any changes I might make to this later in the semester), students will be given a topic(s), a theory(-ies), hypotheses, and data. Students will be asked (A) to design the best test they can assuming plentiful research funds and (B) to test the theory on an existing dataset supplied by the instructor (note that “supplied” might mean a URL address to a data repository). With respect to the second part of this assignment (Part B), students will execute a statistical analysis of the theory, demonstrating their proficiency on everything from data management and transformation to model estimation and interpretation. Part B of the assignment will be weighted more heavily than Part A.

Grading Scale: Barring any unforeseen changes, the grading scale for the course is as follows:

	B+ 89 – 87	C+ 79 – 77	D+ 69 – 67	
A 100 – 93	B 86 – 83	C 76 – 73	D 66 – 63	F 59 – 0
A- 92 – 90	B- 82 – 80	C- 72 – 70	D- 62 – 60	

Note: Final grade percentages ending in a decimal of “.5” or greater will be rounded up to the next whole number.

General Expectations: Students are expected to attend class and participate in discussions. In particular, you are expected to read the required texts/readings *before class* and come to class with questions and/or comments. If you have an emergency situation and cannot fulfill these requirements, you must let me know immediately and before the scheduled date of the exam, homework assignment, or paper.

University Attendance Policy: Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days,

and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy: The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://dof.fsu.edu/honorpolicy.htm>.)

Americans with Disabilities Act: Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice), (850) 644-8504 (TDD)
sdrc@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

Syllabus Change Policy: Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. Please monitor the class webpage on the Blackboard system for the latest announcements and changes.

Helpful Websites:

Data

ICPSR: <http://www.icpsr.umich.edu/icpsrweb/ICPSR/access/index.jsp>

Roper Center's iPoll: http://www.ropercenter.uconn.edu/data_access/ipoll/ipoll.html

Dataverse: <http://thedata.org/>

Issue Correlates of War (ICOW): <http://www.paulhensel.org/icow.html>

Time Sharing Experiments in the Social Sciences (TESS): <http://www.tessexperiments.org/>

Software

Stata: <http://www.stata.com/>

R: <http://www.r-project.org/>

Rstudio: <http://rstudio.org/>

UCLA Statistical Computing: <http://www.ats.ucla.edu/stat/>

Princeton Data Services: http://dss.princeton.edu/online_help/

Gary King's Website: <http://gking.harvard.edu/>

COURSE SCHEDULE

(ALL CLASSES TO BE HELD IN PEPPER 263 UNLESS TOLD OTHERWISE; CHECK BLACKBOARD)

Each week there are assigned readings (“Reading”) and recommended selections (“Recommended”) that you can read if you have finished the others. Whenever possible I will put copies (PDFs) of the assigned non-book readings on the class Blackboard website. In addition to the readings listed below, you will benefit by reading about each week’s topic in an econometrics background reference book (i.e., one of the books listed on the first page).

Week 1 (Aug. 30th & Sept. 1st) – Introduction, Software (e.g., R & Stata), and Data Sources

Reading:

Long & Freese 2006, Ch. 1; Fox & Weisberg 2011, Ch. 1-2

Cameron, Charles. 2009. “What is Political Science?” in Andrew Gelman and Jeronimo Cortina, eds., *A Quantitative Tour of the Social Sciences*. New York: Cambridge University Press, pp. 207-22.

Nagler, Jonathan. 1995. “Coding Style and Good Computing Practices.” *The Political Methodologist* 6 (Spring): 2-7.

Recommended:

Adler 2011, *R in a Nutshell*, Chapters 1-9

Long, J. Scott. 2009. *The Workflow of Data Analysis Using Stata*. College Station, TX: Stata.

Links:

<http://cran.r-project.org/>

<http://www.stata.com/>

<http://www.ropercenter.uconn.edu/>

<http://www.icpsr.umich.edu>

<http://thedata.org/>

Week 2 (Sept. 6th & Sept. 8th) – Data Transformation, Imputation, and Scaling

Reading:

Long 1997, Ch. 1; Long & Freese 2006, Ch. 2; Fox & Weisberg 2011, Ch. 3

King, Gary James, Honaker, Anne Joseph, and Kenneth Scheve. 2001. “Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation.” *American Political Science Review* 95 (Mar.): 49-69.

Ansolabehere, Stephen, Jonathan Rodden, and James M. Snyder, Jr. 2008. “The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting.” *American Political Science Review* 102 (May): 215-32.

Recommended:

Adler, *R in a Nutshell*, Chapters 10-15

Cortina, Jose M. 1993. “What Is Coefficient Alpha? An Examination of Theory and Applications.” *Journal of Applied Psychology* 78 (1): 98-104.

Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge University Press. Chapter 25.

- Gelman, Andrew, Gary King, and Chuanhai Liu. 1998. "Not Asked and Not Answered: Multiple Imputation for Multiple Surveys," *Journal of the American Statistical Association* 93 (September): 846-57.
- Honaker, James, and Gary King. 2010. "What to do about Missing Values in Time-Series Cross-Section Data." *American Journal of Political Science* 54 (April): 561-81.
- King, Gary, Christopher J. L. Murray, Joshua A. Salomon, and Ajay Tandon. 2004. "Enhancing the Validity and Cross-Cultural Comparability of Measurement in Survey Research." *American Political Science Review* 98 (Feb.): 191-207.
- Rubin, Donald B. 2004. *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley.
- Sherman, Robert P. 2000. "Tests of Certain Types of Ignorable Nonresponse in Surveys Subject to Item Nonresponse." *American Journal of Political Science* 44 (April): 356-68.
- Ross, Michael. 2006. "Is Democracy Good for the Poor?" *American Journal of Political Science* 50 (4):860-74.

Links:

<http://www.ats.ucla.edu/stat/r/faq/missing.htm>
<http://gking.harvard.edu/amelia/>

Week 3 (Sept. 13th & Sept. 15th) – Review of Statistical Inference, Hypothesis Testing, and Regression

Reading:

- Long 1997, Ch. 2; Long & Freese 2006, Ch. 3; Fox & Weisberg 2011, Ch. 4
- King, Gary. 1986. "How Not to Lie with Statistics: Avoiding Common Mistakes In Quantitative Political Science." *American Journal of Political Science* 30 (Aug.): 666-87.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14: 63-82.

Recommended:

Adler, *R in a Nutshell*, Ch. 16-20

Week 4 (Sept. 20th & Sept. 22nd) – Estimation (e.g., Maximum Likelihood) and Causality

Reading:

- Long 1997, Ch. 3; King 1989, Ch. 4; Fox & Weisberg 2011, Ch. 5
- Cortina, Jeronimo. 2009. "The Potential-Outcomes Model of Causation," in Andrew Gelman and Jeronimo Cortina, eds., *A Quantitative Tour of the Social Sciences*. New York: Cambridge University Press, pp. 303-8.
- Cortina, Jeronimo. 2009. "Some Statistical Tools for Causal Inference with Observational Data," in Andrew Gelman and Jeronimo Cortina, eds., *A Quantitative Tour of the Social Sciences*. New York: Cambridge University Press, pp. 309-18.
- Winship, Christopher, and Stephen L. Morgan. 1999. "The Estimation of Causal Effects from Observational Data." *Annual Review of Sociology* 25: 659-707.

Gerber, Alan S., Donald P. Green, and Edward H. Kaplan. 2004. "The Illusion of Learning from Observational Research," In Ian Shapiro, Rogers Smith, and Tarek Massoud, *Problems and Methods in the Study of Politics*. New York: Cambridge Univ. Press. pp. 251-73.

Recommended:

Bullock, John G., Donald P. Green, and Shang E. Ha. 2010. "Yes, But What's the Mechanism? (Don't Expect an Easy Answer)." *Journal of Personality and Social Psychology* 98(4): 550-8.

Fearon, James D. 1991. "Counterfactuals and Hypothesis Testing in Political Science." *World Politics* 42 (Jan.): 169-95.

Green, Donald P., Shang E. Ha, and John G. Bullock. 2010. "Enough Already about "Black Box" Experiments: Studying Mediation is More Difficult than Most Scholars Suppose." *Annals of the American Academy of Political and Social Sciences* 628: 200-8.

Gerber, Alan S., Donald P. Green, and David Nickerson. 2001. "Testing for Publication Bias in Political Science." *Political Analysis* 9: 385-92

Morgan, Stephen L., and Christopher Winship. 2007. *Counterfactuals and Causal Inference*. New York, Cambridge University Press.

Paluck, Elizabeth Levy, and Donald P. Green. 2009. "Deference, Dissent, and Dispute Resolution: An Experimental Intervention using Mass Media to Change Norms and Behavior in Rwanda." *American Political Science Review* 103: 622-44.

Week 5 (Sept. 27th & Sept. 29th) – Dichotomous Outcomes (Probit / Logit) & Fit Statistics

Reading:

Long 1997, Ch. 4; Ch. 6; Long & Freese 2006, Ch. 4, 9; Fox & Weisberg 2011, pgs. 233-39.

Gomez, Brad T., and J. Matthew Wilson. 2001. "Political Sophistication and Economic Voting: A Theory of Heterogeneous Attribution." *American Journal of Political Science* 45 (Oct.): 899-914.

King, Gary, Michael Tomz, and Jason Wittenberg . 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (Apr.): 341-55.

Berry, William, Jacqueline H. R. DeMeritt, and Justin Esarey. 2010. "Testing for Interaction in Binary Logit and Probit Models: Is a Product Term Essential?" *American Journal of Political Science* 54 (Jan.): 248-66.

Recommended:

Fredrich, Robert J. 1982. "In Defense of Multiplicative Terms in Multiple Regression Equations." *American Journal of Political Science* 26 (Nov.): 797-833.

Herron, Michael C. 1999. "Postestimation Uncertainty in Limited Dependent Variable Models." *Political Analysis* 8 (1): 83-98.

Huckfeldt, Robert, and John Sprague. 1992. "Political Parties and Electoral Mobilization: Political Structure, Social Structure, and the Party Canvass." *American Political Science Review* 86 (1): 70-86.

Ahlquist, John S. 2010. "Building Strategic Capacity: the Political Underpinnings of Coordinated Wage Bargaining." *American Political Science Review* 104 (Feb): 171-88.

- Vasquez, John A. 2004. "The Probability of War, 1816-1992," *International Studies Quarterly* 48 (March): 1-28.
- Javeline, Debra. 2003. "The Role of Blame in Collective Action: Evidence from Russia." *American Political Science Review* 97 (Feb.): 107-21.
- Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97 (Feb.): 75-90.
- Raftery, Adrian E. 1995. "Bayesian Model Selection in Social Research." *Sociological Methodology* 25: 111-63.
- Gomez, Brad T., and J. Matthew Wilson. 2006. "Cognitive Heterogeneity and Economic Voting: A Comparative Analysis of Four Democratic Electorates." *American Journal of Political Science* 50 (Jan.): 127-45.
- Jackson, Robert A. 2002. "Gubernatorial and Senatorial Campaign Mobilization of Voters." *Political Research Quarterly* 55 (Dec.): 825-44.
- Jackson, Robert A. 1993. "Voter Mobilization in the 1986 Midterm Election." *Journal of Politics* 55 (Nov.): 1081-99.
- Kastellac, Jonathan P., and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science." *Perspectives on Politics* 5 (4): 755-71.

Links:

<http://gking.harvard.edu/zelig/>

Week 6 (Oct. 4th & Oct. 6th) – Ordered Outcomes (Ordered Probit and Ordered Logit)

Reading:

- Long 1997, Ch. 5; Long and Freese 2006, Ch. 5; Fox & Weisberg 2011, pgs. 269-71.
- Alvarez, R. Michael., and Charles H. Franklin. 1994. "Uncertainty and Political Perceptions." *Journal of Politics* 56 (Aug.): 671-88.
- Franklin, Charles H., and Liane C. Kosaki. 1989. "Republican Schoolmaster: The U.S. Supreme Court, Public Opinion, and Abortion." *American Political Science Review* 83 (Sept.): 751-77.

Recommended:

- Franklin, Charles H., and John E. Jackson. 1983. "The Dynamics of Party Identification." *American Political Science Review* 77 (Dec.): 957-73.
- Tate, Katherine. 2003. "Black Opinion on the Legitimacy of Racial Redistricting and Minority-Majority Districts." *American Political Science Review* 97 (Feb.): 45-56.
- Gelpi, Christopher F., and Michael Griesdorf. 2001. "Winners or Losers? Democracies in International Crisis, 1918-94." *American Political Science Review* 95 (Jan.): 633-47.
- Davis, Christina L. 2004. "International Institutions and Issue Linkage: Building Support for Agricultural Trade Liberalization." *American Political Science Review* 98 (Feb.): 153-69.
- Gay, Claudine. 2004. "Putting Race in Context: Identifying the Environmental Determinants of Black Racial Attitudes." *American Political Science Review* 98 (Nov.): 547-62.

Week 7 (Oct. 11th & Oct. 13th) – Nominal Outcomes (Multinomial Logit / Probit)

Reading:

- Long 1997, Ch. 6; Long and Fresse 2006, Ch. 6; Fox & Weisberg 2011, pgs. 259-63.

- Alvarez, R. Michael., Jonathan Nagler, and Shaun Bowler. 2000. "Issues, Economics, and the Dynamics of Multiparty Elections: The British 1987 General Election." *American Political Science Review* 94 (Mar.): 131-49.
- Alvarez, R. Michael, and Jonathan Nagler. 1998. "When Politics and Models Collide: Estimating Models of Multiparty Elections." *American Journal of Political Science* 42 (Jan.): 55-96.

Recommended:

- Alvarez, R. Michael, and Jonathan Nagler. 1995. "Economics, Issues and the Perot Candidacy: Voter Choice in the 1992 Presidential Election." *American Journal of Political Science* 39 (Aug.): 714-44.
- Bahry, Donna P., Mikhail Kosolapov, Polina Kozyreva, and Rick K. Wilson. "Ethnicity and Trust: Evidence from Russia." *American Political Science Review* 99: 521-32.
- Allee, Todd L., and Paul K. Huth. 2006. "Legitimizing Dispute Settlement." *American Political Science Review* 100 (May): 219-34.

Week 8 (Oct. 18th & Oct. 20th) – Advanced Models [CONCENTRATE ON WORKS IN GRAY SHADING]

Exotic Variants (e.g., Heteroskedastic Probit, Bivariate Probit, Grouped Logit, Nested Logit, Alternative-Specific Models)

Reading:

- Long 1997, p. 178; Long and Freese 2006, Ch. 7, Fox and Weisberg 2011, pgs. 264-68.
- Alvarez, R. Michael, and John Brehm. 1995. "American Ambivalence Towards Abortion Policy: Development of a Heteroskedastic Probit Model of Competing Values." *American Journal of Political Science* 39: 1055-82.
- Berinsky, Adam J. 1999. "The Two Faces of Public Opinion." *American Journal of Political Science* 43 (Oct.): 1209-30.
- Kam, Cindy. 2006. "Political Campaigns and Open-Minded Thinking." *Journal of Politics* 68 (Nov.): 931-45.
- Mondak, Jeffrey J. 1999. "Reconsidering the Measurement of Political Knowledge." *Political Analysis* 8(1): 57-82.

Recommended:

- Franklin, Charles H. 1991. "Eschewing Obfuscation? Campaigns and the Perception of U.S. Senate Incumbents." *American Political Science Review* 85 (Dec.): 1193-1214.
- Scholz, John T., and Mark Lubell. 1998. "Trust and Taxpaying: Testing the Heuristic Approach to Collective Action." *American Journal of Political Science* 42 (Apr.): 398-417.

Selection, Censoring, and Truncation (Heckman, Tobit)

Reading:

- Long 1997, Ch. 7, 9; King 1989, Ch. 9
- Sigelman, Lee and Langche Zeng. 1999. "Analyzing Censored and Sample-Selected Data with Tobit and Heckit Models." *Political Analysis* 8: 167-182.
- Berinsky, Adam J. 2002. "Silent Voices: Social Welfare Policy Opinions and Political Equality in America." *American Journal of Political Science* 46 (Apr.): 276-87.

Kam, Cindy. 2007. "When Duty Calls, Do Citizens Answer?" *Journal of Politics* 69 (Feb.): 17-29.

Recommended:

Sartori, Anne. 2003. "An Estimator for Some Binary-Outcome Selection Models Without Exclusion Restrictions." *Political Analysis* 11: 111-38.

Maestas, Cherie, Sarah A. Fulton, L. Sandy Maisel, Walter J. Stone. 2006. "When to Risk it? Institutions, Ambitions, and the Decision to Run for the U.S. House." *American Political Science Review* 100 (May): 195-208.

Golder, Matt. 2003. "Explaining Variation in the Electoral Success of Extreme Right Parties in Western Europe." *Comparative Political Studies* 36: 432-466.

Przeworski, Adam and James Raymond Vreeland. 2002. "A Statistical Model of Bilateral Cooperation." *Political Analysis* 10: 101-112.

Dubin, Jeffrey A. and Douglas Rivers. 1989/1990. "Selection Bias in Linear Regression, Logit, and Probit Models." *Sociological Methods and Research* 18: 360-390.

Endogeneity and Two-Stage Estimators (IV, 2SLS, 2SCML, 2SPLS)

Reading:

Sovey, Allison J., and Donald P. Green. 2011. "Instrumental Variables Estimation in Political Science: A Reader's Guide." *American Journal of Political Science* 55 (Jan.): 188-200.

Alvarez, R. Michael, and Garrett Glasgow. 1999. "Two-Stage Estimation of Nonrecursive Choice Models." *Political Analysis* 8 (2): 147-65.

Green, Donald P., Alan S. Gerber, and David W. Nickerson. 2003. "Getting Out the Vote in Local Elections: Results from Six Door-to-Door Canvassing Experiments." *Journal of Politics* 65 (Nov.): 1083-96.

Recommended:

Hansford, Thomas G., and Brad T. Gomez. 2010. "Estimating the Electoral Effects of Voter Turnout." *American Political Science Review* 104 (May): 268-88.

Ansolabehere, Stephen, and Philip Edward Jones. 2010. "Constituents' Responses to Congressional Roll-Call Voting." *American Journal of Political Science* 54 (July): 583-97.

Week 9 (Oct. 25th & Oct. 27th) – Count Outcomes (Poisson, Negative Binomial, etc.)

Reading:

Long 1997, Ch. 8; Long and Fresse 2006, Ch. 8; Fox & Weisberg, pgs, 269-71.

Zorn, Christopher. 1998. "An Analytic and Empirical Examination of Zero-Inflated and Hurdle Poisson Specifications." *Sociological Methods and Research* 26: 368-400.

Recommended:

Bercovitch, Jacob, and Gerald Schneider. 2000. "Who Mediates? The Political Economy of International Conflict Management." *Journal of Peace Research* 37 (2): 145-65.

Barreto, Matt A., Gary M. Segura, and Nathan D. Woods. 2004. "The Mobilizing Effect of Majority-Minority Districts on Latino Turnout." *American Political Science Review* 98 (Feb.): 65-75.

- Muller, Edward N., and Mitchell A. Seligson. 1987. "Inequality and Insurgency." *American Political Science Review* 81 (2): 425-51.
- Wang, Te-Yu, William J. Dixon, Edward N. Muller, and Mitchell A. Seligson. 1993. "Inequality and Political Violence Revisited." *American Political Science Review* 87 (Dec.): 979-94.
- King, Gary. 1989. "Variance Specification in Event Count Models: From Restrictive Assumptions to a Generalized Estimator." *American Journal of Political Science* 33: 762-784.
- King, Gary. 1988. 'Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model.' *American Journal of Political Science* 32: 838-863.
- King, Gary. 1989. 'Event Count Models for International Relations: Generalizations and Applications.' *International Studies Quarterly* 33: 123-147.
- Chin, Hoong Chor, and Mohammed Abdul Quddus. 2003. "Modeling Count Data with Excess Zeroes: An Empirical Application to Traffic Accidents." *Sociological Methods and Research* 32 (Aug.): 90-115.
- Martin, Andrew D. 2003. "Bayesian Inference for Heterogeneous Event Counts." *Sociological Methods and Research* 32 (Aug.): 30-63.

Week 10 (Nov. 1st & Nov. 3rd) – Time 1 (Time-Series Cross-Section, Duration/Survival, Count Time Series)

Reading:

- Long 1997, pgs. 258-9
- Beck, Nathaniel. 2001. "Time-Series Cross-Section Data: What Have We Learned in the Past Few Years?" *Annual Review of Political Science* 4: 271-93.
- Box-Steffensmeier, Janet M. and Christopher J. W. Zorn. 2001. 'Duration Models and Proportional Hazards in Political Science.' *American Journal of Political Science* 45: 972-88.
- Box-Steffensmeier, Janet., Laura W. Arnold, and Chris Zorn. 1997. 'The Strategic Timing of Position Taking in Congress: A Study of the North American Free Trade Agreement.' *American Political Science Review* 91: 324-38.
- Brandt, Patrick, Benjamin O. Fordham, Brian Pollins and John T. Williams. 2000. "Dynamic Modeling for Persistent Event Count Time Series." *American Journal of Political Science* 44: 823-43.
- Brandt, Patrick and John T. Williams. 2001. "A Linear Poisson Autoregressive Model: The Poisson AR(p) Model." *Political Analysis* 9: 164-84.

Recommended:

- Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not To Do) with Time-Series Cross-Section Data." *American Political Science Review* 89 (Sept.): 634-47.
- Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. 'Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable.' *American Journal of Political Science* 42: 1260-88.
- Gomez, Brad T., Thomas G. Hansford, and George A. Krause. 2007. "The Republicans Should Pray for Rain: Weather, Turnout, and Voting in U.S. Presidential Elections." *Journal of Politics* 69 (Aug.): 649-63.

- Epstein, David, Robert Bates, Jack Goldstone, Ida Kristensen, and Sharyn O'Halloran. 2006. "Democratic Transitions." *American Journal of Political Science* 50: 551-569.
- Box-Steffensmeier, Janet M. and Bradford S. Jones. 2004. *Event History Modeling: A Guide for Social Scientists*. New York: Cambridge University Press.
- Boehmke, Frederick J., Daniel Morey, and Megan Shannon. 2006. "Selection Bias and Continuous Time Duration Models: Consequences and a Proposed Solution." *American Journal of Political Science* 50: 192-207.
- Mitchell, Sara McLaughlin, and Will H. Moore. 2002. "Presidential Uses of Force During the Cold War: Aggregation, Truncation, and Temporal Dynamics." *American Journal of Political Science* 46 (Apr.): 438-52.

Week 11 (Nov. 8/10th) – Proposal Workshop (In Class Discussion of Papers)

Week 12 (Nov. 15th & Nov. 17th) – Proposal Workshop (In Class Discussion of Papers)

Week 13 (Nov. 22nd, No Class on 11/24 due to T-giving) – OPTIONAL LECTURE

Helpful Topics (e.g., Experiments, Statistical Power)

Readings:

- McDermott, Rose. 2002. "Experimental Methodology in Political Science." *Political Analysis* 10: 325-42.
- Dunning, Thad. 2008. "Improving Causal Inference: Strengths and Limitations of Natural Experiments." *Political Research Quarterly* 61 (June): 282-93.
- Green, Donald P., Terence Y. Leong, Holger L. Kern, Alan S. Gerber, and Christopher W. Laimier. 2009. "Testing the Accuracy of Regression Discontinuity Analysis using Experimental Benchmarks." *Political Analysis* 17 (Autumn): 400-17.
- Zaller, John. 2002. "The Statistical Power of Election Studies to Detect Media Exposure Effects in Political Campaigns." *Electoral Studies* 21: 297-329.

Hot Topics (e.g., Matching, Multilevel/Hierarchical Models)

Readings:

- King, Gary, and Langche Zeng. 2007. "When Can History Be Our Guide?: The Pitfalls of Counterfactual Inference." *International Studies Quarterly* 51: 83-210.
- Imai, Kosuke. 2005. "Do Get-Out-the-Vote Calls Reduce Turnout? The Importance of Statistical Methods for Field Experiments." *American Political Science Review* 99 (May): 283-300.
- Ho, Daniel, Kosuke, Imai, Gary King, and Elizabeth Stuart. 2007. "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference." *Political Analysis* 15: 199-236.
- Steenbergen, Marco R., and Brad S. Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46 (Jan.): 218-37.

Week 14 (Nov. 29th & Dec. 1st) – Project Presentations, Part I

Week 15 (Dec. 6th & Dec. 8th) – Project Presentations, Part II

Paper Due on Dec. 12th at noon or TBA

Exam Week (Date & Time to be Announced)

A	α	alpha	a	“father”
B	β	beta	b	
Γ	γ	gamma	g	
Δ	δ	delta	d	
E	ε	epsilon	e	“end”
Z	ζ	zêta	z	
H	η	êta	ê	“hey”
Θ	θ	thêta	th	“ thick ”
I	ι	iota	i	“it”
K	κ	kappa	k	
Λ	λ	lamda	l	
M	μ	mu	m	
N	ν	nu	n	
Ξ	ξ	xi	ks	“box”
O	ο	omikron	o	“off”
Π	π	pi	p	
P	ρ	rho	r	
Σ	σ, ς	sigma	s	“say”
T	τ	tau	t	
Υ	υ	upsilon	u	“put”
Φ	φ	phi	f	
X	χ	chi	ch	“ Back ”
Ψ	ψ	psi	ps	
Ω	ω	omega	ô	“grow”