

Political Science / Science Politique

Academic year 2009 - 2010

Statistics for International Relations Research I

E813 – Fall Semester – 6 ECTS

Fridays 09:00 - 12:00 (Rigot R2 and Rigot Computer Lab)

Course Description

This course introduces MIS students in political science to statistical analysis. The course focuses on understanding statistical thinking, its application in social science research, and interpretation of political science literature. The goal of the course is to develop quantitative skills for undertaking analytical and research activities, first for the MA thesis and then for future efforts.

> PROFESSOR

Dr. Jennifer van Heerde
Visiting Professor

UCL Contact Details
j.heerde@ucl.ac.uk
+44 (0)20.7679.4781

> ASSISTANT

Georg von Kalckreuth
PhD Candidate in Political Science
georg.von.kalckreuth@graduateinstitute.ch

Office: Rigot 26
+41 22 908 5941
Office Hours: Thu 1615 – 1800
and by appointment

Syllabus

Introduction

The course introduces students to introductory statistics used in social and political science. Quantitative statistical techniques are extremely useful methods for analyzing large quantities of data and mastering these skills is increasingly important to employers, in both the public and private sector. The course has three primary aims. By the end of the term, students should be able to: 1) understand introductory quantitative research concepts and methods; 2) use one or more of these techniques in future research; and 3) evaluate quantitative techniques used in social science research.

The course is divided into two sections, descriptive and inferential statistics, with the latter constituting a majority of the course. Descriptive statistics centre on two main concepts, central tendency and dispersion, and allow us to present summary information for variables. Inferential statistics (bivariate and multivariate statistical techniques) allow us to estimate population parameters based on (usually) much smaller samples. Inferential statistics are anchored in probability theory and provide the basis for hypothesis testing.

Course Meetings and Format

There are nine lectures and lab sessions for this course, however students should dedicate at least two hours of study during weeks where lectures/labs are not held. Attendance is required; please inform the course tutor promptly if you are unable to make class. Meetings will be comprised of a 1.5 hour lecture (9.00-10.30) in Rigot R2 followed by a short break (10.30-10.45), and a 1.25 (10.45-12.00) hour lab session in the Rigot computer lab opposite R2. The lab sessions offer students the opportunity to put the concepts and techniques introduced in lecture into practice using SPSS statistical software.

Course related material and announcements will be available on the course website available at: <http://graduateinstitute.ch/political-science/statistics-international-relations-2009.html>

Evaluation

There are two assessed pieces of coursework, a quantitative research design paper (50% of course mark) and weekly assignments (50% of course mark). Details for assessment are given below.

Quantitative Research Design Paper

A research design paper is essentially a plan or blueprint for research that you will conduct sometime in the future and differs from other papers that you may have written previously. Research design papers are both an explanation, and defence of, the research that you intend to carry out. For this assignment, you will not conduct the actual analyses and write up the results, instead, your aim is to think about the various components of the research process and design a plan for answering a question of interest. The paper should include: 1) a brief introduction to the question, outlining its political, economic, or social importance/salience and the contribution the research intends to make; 2) a brief review of the literature the research question draws on, and identify which theoretical framework(s) the author will employ; 3) identify hypotheses/propositions or relationships of interest and any independent and dependent variables; 4) a discussion of the how the variables are measured and concepts operationalised; 5) identify the appropriate data and how it is acquired, coded, etc; and 6) detail the analyses you will perform to provide empirical evidence for your research question. The research design paper is due Friday 18 December 2009 (12 noon) and one copy should be submitted by email to *both* the course tutor and the teaching assistant.

Particulars

- The paper should be 4,000 words (+/- 5%).
- The paper should be fastened with a single staple in the upper-left hand corner; please do not use fancy folders or binders.
- Plagiarism is not tolerated and will be dealt with appropriately. You are free to use any referencing system (e.g. Harvard, MLA, Chicago, etc.) so long as it is used consistently and accurately.
- Papers should be written in essay format using clearly demarcated subject headings, double-spaced, employ proper sentence structure, be free of spelling and grammatical errors and use double-spaced A4 pages and an 11 or 12 point font.
- Include a cover page with the following information: (1) title of research design paper, (2) name, and (3) programme.

Content

General Introduction (1-2)¹

The introduction should speak to the question you are addressing. Why is this question an important one? How does it advance knowledge in political science? Is it a timely question? What is the broader social/political/geopolitical context that frames your question? What are the theoretical underpinnings? What do you hope to learn from the research? What is the anticipated contribution?

Literature Review (not to exceed 5 pages)

The literature review should clearly identify existing debates, controversies, theoretical and methodological approaches of previous work. The literature review should possess both a knowledge and evaluative component: the knowledge component should identify what is known about a question, approaches and findings; the evaluative component should identify the strengths or weaknesses of the literature, gaps, and theoretical or methodological problems. Overall, the literature review should demonstrate that you have investigated and assessed literature on a topic of interest to you and *how your research question develops from the extant literature*. This should not be an exhaustive review of the literature, rather it should highlight the seminal pieces that inform your research, provide an assessment of the literature, and show how the proposed research will remedy a gap in the literature.

¹ These are approximate page allocations you should devote to each section.

Research Question (2-3)

In this section you want to clearly articulate your research question, key propositions and hypotheses. Remember that your research question needs to be focused; it should identify the specific individuals, events, groups, or phenomena of interest and state the relationship of interest. You should further refine your question to identify the key variables of interest, and state the expected relationship between those variables and/or concepts. Are the independent and dependent variable(s) clearly identified? How are the key concepts measured/operationalised?

Research Design (2)

Does your design and methodology fit with the existing empirical research or are you taking an alternative approach? If so, why? How will your design add, clarify, or shed new light? Does your research replicate an existing method using a different case? Is the research design appropriate for the research question? How does your design account for validity and reliability? Is your design experimental or non-experimental? Is your design cross-sectional or longitudinal? How are you modeling the relationship? What is your population/sample? Is this sample appropriate and why? What is the unit of analysis?

Data Collection (2)

The aim of this section is to link your data sources to the variables listed in previous sections. You should demonstrate what data sources will be used for each variable and describe the data and its measurement. Do you have access to the data? Are there licence or copyright issues that you must comply with? How long will it take to clean and/or recode data? If you are generating your own survey, draft the survey and include it in the appendix. How far in advance must you send out a survey? What is the anticipated response rate?

Analysis (3)

Detail descriptive and inferential statistical techniques you will use to provide evidence for your research question. What method(s) will you use to test your hypotheses/propositions? How will you know if you have explained variation sufficiently? If you are conducting a regression analysis, will you be using OLS regression or probit/logit? Why? Do you have a sufficient sample size? What, if any problems do you see in performing your analysis?

Schedule and Budget (1)

Your research design should include a timetable of expected completion dates and budget (if applicable) that will serve as a guideline for your progress. You should be realistic concerning completion dates; most activities take longer than expected. If you are proposing to do interviews or conduct surveys, you need to consider your schedule very carefully. It takes several months to design, administer and collect a survey. Do you have resources outside your own personal monies to pay for paper, postage, etc.? Have you been flexible in scheduling your interviews? Will you/your subject(s) be leaving for holiday or attending to other matters?

Bibliography and Appendices

Each paper should include a bibliography or reference page (not included in word count). If you are planning on doing interviews or conducting a survey, you should include a sample survey instrument or preliminary interview questions in the appendix.

Assignments

The assignments/problem sets consist of 5-10 questions that are designed to evaluate your understanding of the course material. Each assignment will be a combination of short answer/essay questions and exercises to be executed using SPSS software. Assignments must be type-written, single spaced and should represent the work of the designated student only; collaboration is prohibited. There are 8 assignments for the course; please note the following schedule for due dates. Assignments must be emailed to the course tutor and teaching assistant no later than 5pm on the stated due date.

Assignment	Date Given	Date Due	Topic
1	25 September	9 October	Descriptive Statistics
2	9 October	16 October	Inferential Statistics
3	16 October	30 October	Inferential Statistics
4	30 October	6 November	Inferential Statistics
5	6 November	20 November	Correlation
6	20 November	27 November	Regression I
7	27 November	11 December	Regression II
8	11 December	18 December	Regression III

Reading²

It is recommended that you purchase/acquire the following texts for the course as we will be using them extensively.

- Kinnear and Gray. 2009. *SPSS 16 Made Simple*. Psychology Press.
- Levin, Jack, James Fox, and David Forde. 2009. *Elementary Statistics in Social Research*, 11th edition. (International Edition). Pearson/Allyn and Bacon.

The Allison text is a very good introduction to regression analysis; I list it here as recommended reading.

- Allison, Paul D. 1999. *Multiple Regression: A Primer*. London: Pine Forge Press.

You can purchase these three texts, at a slight discount, at Librairie Ellipse in the Pâquis, Rue Rousseau 14, opposite Manor (<http://www.ellipse.ch/Help/Plan.aspx>), where a sufficient number of copies of these three books has been pre-ordered.

It is expected that students have read the material prior to coming to lecture and labs. The reading list is segmented into Required, Further, and In-Practice sections. Items designated as 'Further' reading are not required for the course, however, they may be useful supplementary reading. Where applicable, a section entitled 'In Practice' is given to provide students with a concrete example of the method under study.

Course Calendar

Session	Date	Topic
1	18 September	Descriptive Statistics I
2	25 September	Descriptive Statistics II
3	9 October	Inferential Statistics I
4	16 October	Inferential Statistics II
5	30 October	Inferential Statistics III
6	6 November	Correlation
7	20 November	Regression I
8	27 November	Regression II
9	11 December	Regression III

² Readings designated with ** will be provided by the course tutor and made available on the website as PDFs.

1. Descriptive Statistics I: 18 September

A. Topics

Introduction to Quantitative Data Analysis; SPSS; Entering Data; Saving SPSS Files; Data Editor; Syntax; Output Files; Labels; Types of Variables; Sorting Cases; Split File Analysis; Descriptive Statistics

B. Required Reading

Levin et al. (ch 1)

Kinnear and Gray. (chs 2-5)

C. Further Reading

Babbie, Earl, and Fred Halley. 1994. *Adventures in Social Research: Data Analysis Using SPSS*. Thousand Oaks: Pine Forge Press.

Einspruch, E. 1998. *An Introductory Guide to SPSS for Windows*. London: Sage.

Foster, J. 1998. *Data Analysis Using SPSS for Windows: A Beginner's Guide*. London: Sage.

Kinnear, P. and C. Gray. 1997. *SPSS for Windows Made Simple*. Hove: Psychology Press.

Morgan, George et al. 2004. *SPSS for Introductory Statistics: Use and Interpretation*. Lawrence Erlbaum.

Pallant, Julie. 2007. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*. Buckingham: Open University Press.

D. In Practice

Hood, M., and G. Neeley. 2000. "Packin' in the Hood? Examining Assumptions of Concealed Handgun Research." *Social Science Quarterly* 82(2): 523-537. (Crosstabs)

Rocheftort, David A., ed. 2005. *Quantitative Methods in Practice: Readings from PS*. Washington, D.C.: CQ Press. (Review of papers using quantitative methods)

2. Descriptive Statistics I: 25 September

A. Topics

Levels of Measurement; Measures of Central Tendency; Measures of Variability; Variance; Standard Deviation; Univariate Statistics; Statistical Notation; Graphs

B. Required Reading

Levin et al. (chs 2-4)

Kinnear and Gray. (ch 1)

C. Further Reading

Herrnson, Paul. 1995. "Replication, Verification, Secondary Analysis and Data Collection in Political Science." *PS: Political Science and Politics* 28(3): 452-455.

Huff, D. 1991. *How to Lie with Statistics*. London: Penguin.

King, Gary. 1986. "How Not to Lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science." *American Journal of Political Science*, Vol. 30 (3): 666-687.

Manheim, Jarol, et al. 2002. *Empirical Political Analysis: Research Methods in Political Science*. Boston: Longman Publishers.

Pennings, Paul, Hans Keman, and Jan Kleinnijenhuis. 1999. *Doing Research in Political Science: An Introduction to Comparative Methods and Statistics*. London: Sage.

Rowntree, D. 1991. *Statistics without Tears: A Primer for Non-Mathematicians*. London: Penguin.

Weisberg, Herbert. 1991. *Central Tendency and Variability*. Series: Quantitative Applications in the Social Sciences. Thousand Oaks: Sage.

Blaikie, Norman. 2003. *Analyzing Quantitative Data*. London: Sage.

D. In Practice

Hanson, Brian T. 1998. "What Happened to Fortress Europe? External Trade Policy Liberalization in the European Union." *International Organization* 51(2): 55-85.

Mann, Thomas, and Raymond Wolfinger. 1980. "Candidates and Parties in Congressional Elections." *American Political Science Review* 74(3): 617-632.

Piazza, James. 2008. 'Incubators of Terror: Do Failed and Failing States Promote Transnational Terrorism?' *International Studies Quarterly* 52(3): 469-488. (descriptive statistics; time series, negative binomial analysis)

3. Inferential Statistics I: 9 October

A. Topics

Probability; Normal Distribution; T-Distribution; Central Limit Theorem; Samples and Populations; Testing Null and Research Hypotheses; Type I v. Type II Errors;

B. Required Reading

**Agresti and Finlay. (ch 4)

Levin et al. (ch 5)

C. Further Reading

Agresti, Alan, and Barbara Finlay. 2008. *Statistical Methods for the Social Sciences* (International edition 4th). New Jersey: Pearson Education.

Black, Thomas R. 1999. *Doing Quantitative Research in the Social Sciences: An Integrated Approach to Research Design, Measurement and Statistics*. London: Sage Publications.

Hanushek, Eric, and J. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic Press.

Kranzler, Gerald, and Janet Moursund. 1995. *Statistics for the Terrified*. New Jersey: Prentice Hall.

Pollock, Philip. 2003. *The Essentials of Political Analysis*. Washington DC: CQ Press.

Salkind, Neil J. 2004. *Statistics for People Who Think They Hate Statistics*. London: Sage.

Williams, Frederick. 1979. *Reasoning with Statistics*, 2nd ed. New York: Holt, Rinehart, and Winston.

Weiss, Neil. 2005. *A Course in Probability*. Addison Wesley.

4. Inferential Statistics II: 16 October

A. Topics

Samples and Populations; Statistical Inference; Point and Interval Estimation; Confidence Interval for a Mean, Median; Significance Tests; Testing Differences between Means; Analysis of Variance

B. Required Reading

Kinnear and Gray. (ch 6)

Levin et al. (chs 6-8)

C. Further Reading

Agresti, Alan, and Barbara Finlay. 2008. *Statistical Methods for the Social Sciences* (International edition 4th). New Jersey: Pearson Education.

King, Gary. 1989. *Unifying Political Methodology: The Likelihood Theory of Statistical Inference*. Ann Arbor: The University of Michigan Press.

DeGroot, Morris, and Mark Schervish. 2002. *Probability and Statistics*. Massachusetts: Addison-Wesley.

McClave, James T., and Terry Sincich. 2003. *A First Course in Statistics*, 8th ed. New Jersey: Prentice Hall.

Willemsen, Eleanor Walker. 1974. *Statistical Reasoning: How to Evaluate Research Literature in the Behavioral Sciences*. San Francisco: W.H. Freeman and Co.

D. In Practice

Morrell, Michael E. 1999. 'Citizens' Evaluations of Participatory Democratic Procedures: Normative Theory Meets Empirical Science.' *Political Research Quarterly* 52: 293-322. (t-tests and ANOVA)

Reisinger, William M. et al. 1994. "Political Values in Russia, Ukraine, and Lithuania: Sources and Implications for Democracy." *British Journal of Political Science* 24: 183-223. (t-tests)

Weaver-Lariscy, Ruth Ann, and Spencer F. Tinkham. 1987. "The Influence of Expenditure and Allocation Strategies in Congressional Advertising Campaigns." *Journal of Advertising* 16(3):13-21. (ANOVA)

5. Inferential Statistics III: 30 October

A. Topics

Contingency Tables; Chi Square Test of Significance; Measures of Association; Non-parametric Comparisons

B. Required Reading

Kinnear and Gray. (ch 11)

Levin et al. (chs 9, 12)

C. Further Reading

Bray, James H., and Scott Maxwell. 1985. *Multivariate Analysis of Variance*. Series: Quantitative Applications in the Social Sciences. Thousand Oaks, CA: Sage.

Kerr, Alistair et al. 2003. *Doing Statistics with SPSS*. London: Sage.

Levin, Jack, and James Alan Fox. 1997. *Elementary Statistics in Social Research*. Boston: Allyn and Bacon.

Carlson, James M., and Mark S. Hyde. 2003. *Doing Empirical Political Research*. Boston: Houghton-Mifflin.

D. In Practice

Licklider, Roy. 1995. 'The Consequences of Negotiated Settlements in Civil Wars, 1945-1993. *American Political Science Review* 89(3): 681-690. (Chi Square)

Bremer, Stuart. 1992. 'Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1916-1965.' *Journal of Conflict Resolution* 36(2): 309-341.

6. Correlation: 6 November

A. Topics

Strength and Direction of Correlation; Pearsons' r ; Partial Correlation; Non-Parametric Measures of Correlation

B. Required Reading

** Agresti and Finlay. (ch 9)

Levin et al. (ch 10)

C. Further Reading

Bryman, Alan, and Duncan Cramer. 1990. *Quantitative Data Analysis for Social Scientists*. London: Routledge.

Chen, Peter Y. and Paula M. Popovich. 2002. *Correlation: Parametric and Non-Parametric Measures*. Series: Quantitative Applications in the Social Sciences. Thousand Oaks: Sage.

Cramer, Duncan. 1997. *Basic Statistics for Social Research: Step by Step Calculations and Techniques Using Minitab*. London: Routledge.

Gibbons, Jean D. 1993. *Non-Parametric Measures of Association*. Series: Quantitative Applications in the Social Sciences. Newbury Park: Sage.

Gibbons, Jean D., and Subhabrata Chakraborti. 2003. *Nonparametric Statistical Inference*, 4th ed. New York: Marcel Dekker.

Kranzler, Gerald, and Janet Moursund. 1995. *Statistics for the Terrified*. New Jersey: Prentice Hall.

Liebetrau, Albert M. 1983. *Measures of Association*. Series: Quantitative Applications in the Social Sciences. Thousand Oaks: Sage Publications

D. In Practice

Alford, John R., Carolyn Funk, and John R. Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" *American Political Science Review* 34(3): 771-802.

Hurwitz, Jon, and mark Peffley. 1997. "Public Perceptions of Race and Crime: The Role of Racial Stereotypes." *American Journal of Political Science* 41(2): 375-401.

Norrander, Barbara. 2000. "The End Game in Post-Reform Presidential Nominations." *Journal of Politics* 62(4): 999-1013.

Casper, Gretchen, and Claudia Tufis. 2002. "Correlation versus Interchangeability: The Limited Robustness of Empirical Findings on Democracy Using Highly Correlated Data Sets." *Political Analysis* 11(2): 1-11.

7. Regression Analysis I: 20 November³

A. Topics

Bivariate and Multivariate Regression; Ordinary Least Squares Regression (OLS); Assumptions of Regression; Gauss-Markov Theorem; OLS Estimators as BLUE

B. Required Reading

**Agresti and Finlay. (ch 9)

Kinney and Gray. (ch 12: pgs 436-456)

Levin et al. (ch 11)

C. Further Reading

Achen, Christopher. 1982. *Interpreting and Using Regression*. Series: Quantitative Applications in the Social Sciences, No. 29. Thousand Oaks, CA: Sage.

Allison, P. 1999. *Multiple Regression: A Primer*. Thousand Oaks, California: Pine Forge Press.

Berry, William D. 1993. *Understanding Regression Assumptions*. Series: Quantitative Analysis in the Social Sciences. Thousand Oaks: Sage.

Box-Steffensmeier, Janet, and T. Tate. 1995. "Data Accessibility in Political Science: Putting the Principle into Practice." *PS: Political Science and Politics* 28 (3): 10-21.

Bryman, Alan, and Duncan Cramer. 1990. *Quantitative Data Analysis for Social Scientists*. London: Routledge.

Hanushek, Eric A., and John E. Jackson. 1977. *Statistics for Social Scientists*. New York: Academic Press.

Lewis-Beck, Michael S. 1995. *Data Analysis: An Introduction*. Thousand Oaks: Sage.

Nagler, Jonathan. 1995. "Coding Style and Good Computing Practices." *PS: Political Science and Politics* 28 (3): 2-9.

D. In Practice

Hiskey, Jonathan T. 2003. "Demand-Based Development and Local Electoral Environments in Mexico." *Comparative Politics* 36(1): 41-59.

Cox, Gary W. , and Eric Magar. 1999. "How Much is Majority Status in the U.S. Congress Worth?" *American Political Science Review* 93(2): 299-309.

Davis, David R., and Will H. Moore. 1997. "Ethnicity Matters: Transnational Ethnic Alliance and Foreign Policy Behavior." *International Studies Quarterly* 41: 171-184.

Gibson, James L., and Gregory A. Caldeira. 1998. "Changes in the Legitimacy in the European Court of Justice: A Post-Maastricht Analysis." *British Journal of Political Science* 28: 63-91.

³ If you are unfamiliar with regression analysis and desire an easy introduction, I strongly recommend: Allison, P. 1999. *Multiple Regression: A Primer*. Thousand Oaks, California: Pine Forge Press.

8. Regression Analysis II: 27 November

A. Topics

Interaction and Dummy variables; R^2 Coefficient of Determination; Regression Diagnostics; Multicollinearity; Heteroscedasticity; Autocorrelation

B. Required Reading

**Agresti and Finlay. (chs 10, 11)

Kinnear and Gray. (ch 12: pgs 456-483)

C. Further Reading

Amemiya, Takeshi. 1985. *Econometric Models: Introduction to Statistics and Econometrics*. Cambridge, MA: Harvard University Press.

Berry, William D., and Stanley Feldman. 1985. *Multiple Regression in Practice*. London: Sage.

Draper, N., and H. Smith. 1981. *Applied Regression Analysis*. New York: John Wiley.

Fox, John. 1991. *Regression Diagnostics: An Introduction*. Series: Quantitative Applications in the Social Sciences. Thousand Oaks: Sage Publishers.

Gujarati, Damodar. 1992. *Essentials of Econometrics*. New York: McGraw-Hill.

Lewis-Beck, Michael. 1980. *Applied Regression: An Introduction*. Series: Quantitative Applications in the Social Sciences, 22. Thousand Oaks: Sage Publishers.

Schroeder, Larry D., David L. Sjoquist, and Paula, E. Stephan. 1986. *Understanding Regression Analysis: An Introductory Guide*. Thousand Oaks, CA: Sage Publications.

D. In Practice

Burden, Barry C., and David C. Kimball. 1998. "A New Approach to the Study of Ticket Splitting." *American Political Science Review* 92(3): 533-544. (OLS)

Fearon, James and David Laitin. 1996. "Explaining Interethnic Cooperation." *American Political Science Review* 90(4): 715-35.

van Heerde, Jennifer, Martin Johnson, and Shaun Bowler. 2006. "Barriers to Participation, Voter Sophistication, and Candidate Spending Choices in U.S. Senate Elections." *British Journal of Political Science* 36(4): 745-758. (OLS and logit)

Kenny, Christopher, and Michael McBurnett. 1997. "Up Close and Personal: Campaign Contact and Spending in U.S. House Elections." *Political Research Quarterly* 50(1): 75-96.

9. Regression Analysis III: 11 December

A. Topics

Introduction to regression for categorical dependent variables Regression with Binary/Categorical Dependent Variables; Assumptions of Logistic Regression; Probabilities/Odds/Log-odds; Maximum Likelihood Estimation Models; Interpreting Logit/Probit Coefficients; Model Fit; Likelihood test

B. Required Reading

**Agresti and Finlay. (chs 14-15)

Kinnear and Gray. (ch 13: pgs 542-563)

**Pampel, Fred C. 2000. *Logistic Regression: A Primer*. Thousand Oaks, CA: Sage. (pgs 1-53)

C. Further Reading

Agresti, A. 1996. *An Introduction to Categorical Data Analysis*. New York: John Wiley and Sons.

Alba, R.D. 1988. Interpreting the Parameters of Log-Linear Models. In J.S. Long (Ed.) *Common Problems/Proper Solutions: Avoiding Error in Quantitative Research*. Newbury Park, CA: Sage.

Aldrich, John H., and Forrest D. Nelson. 1984. *Linear Probability, Logit and Probit Models*. Series: Quantitative Applications in the Social Sciences, 45. London: Sage.

Finney, D. 1971. *Probit Analysis*. Cambridge: Cambridge University Press.

Demaris, A. 1995. "A Tutorial in Logistic Regression." *Journal of Marriage and the Family* 57: 956-968.

Demaris, A. 1992. "Odds versus Probabilities in Logit Equations: A Response to Roncek." *Social Forces* 71: 1057-1065.

Gill, Jeff. 2000. *Generalized Linear Models: A Unified Approach*. Thousand Oaks: Sage.

Gourieroux, Christian. 2000. *Econometrics of Qualitative Dependent Variables*. New York: Cambridge University Press.

Lloyd, Chris. 1999. *Statistical Analysis of Categorical Data*. New York: Wiley.

Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*. London: Sage.

Long, J. Scott and Jeremy Freese. 2003. *Regression Models for Categorical Dependent Variables Using Stata, Revised Edition*, College Station: Stata Press.

Maddala, G. 1983. *Limited Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press.

Sanders, David, and Malcolm Brynin. 1998. "Ordinary Least Squares and Logistic Regression Analysis." In, Elinor Scarbrough and Eric Tanenbaum, eds., *Research Strategies in the Social Sciences: A Guide to New Approaches*. Oxford: Oxford University Press.

Spector, L. and M. Mazzeo. 1980. "Probit Analysis and Economic Education." *Journal of Economic Education* 11: 37-44.

D. In Practice

Alvarez, R. Michael, Jonathan Nagler, and Shaun Bowler. 2000. "Issues, Economics and the Dynamics of Multiparty Elections." *American Political Science Review* 94(1): 131-149.

Collier, Paul, and Anke Hoeffler. 2004. 'Greed and Grievance in Civil War.' *Oxford Economic Papers* 56(4): 563-595.

Dow, Jay K. and James W. Endersby. 2004. "Multinomial Probit and Multinomial Logit: A Comparison of Choice Models for Voting Research." *Electoral Studies* 23: 107-122.

Fordham, Benjamin. 2008. "Economic Interests and Congressional Voting on Security Issues." *Journal of Conflict Resolution* 52(5): 623-40. (Probit)

Goldstein, Ken, and Paul Freedman. 2000. "New Evidence for New Arguments." *Journal of Politics* 62(4): 1087-1108.

van Heerde, Jennifer and David Hudson. (2009 in press) 'The Righteous Considereth the Cause of the Poor'? Public Attitudes towards Poverty in Developing Countries'. *Political Studies*.

Stewart, Charles, and Mark Reynolds. 1990. "Television Markets and U.S. Senate Elections." *Legislative Studies Quarterly* 15(4): 495-523.

Whitten, Guy D. and Harvey D. Palmer. 1996. "Heightening Comparativists' Concern for Model Choice: Voting Behavior in Great Britain and the Netherlands." *American Journal of Political Science* 40(1):231-26.