

Quantitative Empirical Methods Reading List

The objectives of the QEM field are threefold: to encourage graduate students to master the main techniques of quantitative research employed in political science, to stimulate students to think about how they would design and implement empirical research projects that are both tractable and illuminating, and to train students to become intelligent consumers of quantitative work.

Coursework

Coursework in the field falls into two categories. The first is the basic three-course sequence, PLSC 500, PLSC 503, and PLSC 504, which introduce the main ideas in quantitative research methodologies including sampling, design, modeling, estimation, and measurement. The second category of classes are more specialized courses in the department such as PLSC 506, PLSC 507, PLSC 508, and PLSC 512 addressing topics such as experimental methods and nonparametric statistics in greater depth than offered in the general sequence. Other specialized courses are offered in other departments. More generally, the QEM field spans the breadth of political science, and you are expected to be familiar with methodological issues in international relations, comparative politics, American politics, and kindred fields.^a

Exam Format

The exam has two parts. You will have five hours to complete Part 1, and you are only permitted (1) one page of double-sided notes, (2) a calculator, and (3) a word processor on one of the Statlab computers to write up your answers. (You may also write up answers using pencil/pen and paper.) You will have two hours to complete Part 2, which will require you to use statistical software. For Part 2 you may use your own computer or a Statlab computer and may access the internet. The only restriction for Part 2 is that you may not interact with anyone, online or otherwise. You must also credit in your answer any sources (code or references) that help you.

In addition to more conventional exam questions, the exam may also ask you to critique a research paper, to analyze some data, or other tasks involving interacting with statistical software.

Exam Content

The distribution of topics likely to appear on the exam will be similar to the distribution of content covered by the lectures, homework, exams, and readings—in that order of importance—from the core courses (500, 503, 504) in the two years preceding the exam. Therefore, to prepare for the QEM exam, we recommend that you, at minimum, master the content covered by the lectures, homework, exams, and core readings from 500, 503, and 504, and be familiar with the supplementary readings from these courses. Note, however, that any topic also covered on the reading list may appear on the exam. You can find a reading list for the QEM exam below.

To achieve competence in the quantitative methods field you must be familiar with the main statistical methods of political science, understand the trade-offs in their use, and understand the underlying principles behind causal inference and predictive inference. This includes, but is not limited to, expertise in topics such as the potential outcomes framework, multivariate regression, issues of model specification and modeling assumptions, statistical inference, likelihood inference (and MLE), Bayesian inference, causal graphs and structural models, nonparametric methods, and research design. In addition, you are required to have sufficient competence with R or Stata to implement specific methods relevant to the above topics. For example, you should be able to do the following without reliance on canned routines: conduct a randomization test, evaluate the properties of an estimator under some assumed data-generating process, fit a specialized likelihood estimator to data, and present results graphically.

Evaluation

Three faculty members grade the exams blind and assign grades of fail, satisfactory minus, satisfactory, satisfactory plus, or distinction. A pass demonstrates sufficient competence with the topics and skills required for a scholar to engage critically with the quantitative methods field and to apply carefully quantitative methods to research. A distinction demonstrates mastery of these topics and skills.

The best exam answers are clear, comprehensive, and correct. They employ mathematics as appropriate, as well as articulate a deep understanding of the concepts and issues. For example, concepts such as *endogeneity* should be clearly and concisely defined, rather than simply referenced.

Reading List

Here is a reading list of methodologically informative books and articles that should help you prepare for the exam. They are organized by topic area to facilitate your study.

I. Statistical and Mathematical

You should have a strong command of probability theory, conditional probability and independence, Bayes' rule, discrete distributions, continuous distributions, expectations, variance, and covariance.

a. General references

The following books are ordered from the least to the most mathematical:

- Freedman, David, Robert Pisani, and Roger Purves. *Statistics*. W.W. Norton & Co., Fourth Edition.
- Freedman, David, and David Lane. 1981. *Mathematical Methods in Statistics*. New York: W.W. Norton & Co.

- Wonnacott, Thomas H. and Ronald J. Wonnacott. 1990. *Introductory Statistics for Business and Economics*. John Wiley & Sons Inc.
- Morris H. DeGroot and Mark J. Schervish. 2002. *Probability and Statistics*. Reading, MA: Addison-Wesley, Third Edition.
- Lehmann, Erich L. 1986. *Testing Statistical Hypotheses*. Springer, Second Edition.
- Lehmann, Erich L. 1983. *Theory of Point Estimation*. John Wiley & Sons.

b. Foundations of statistics

- Freedman, David A.; David Collier, Jasjeet Sekhon, and Philip Stark, eds. *Statistical Models and Causal Inference: A Dialogue with the Social Sciences*. Cambridge University Press, Chapters 1-3, 8.
- Some familiarity with the Bayesian perspective on statistics is useful. Among the many texts that are out there, see:
- Iverson, G.R. 1984. *Bayesian Statistical Inference*. Beverly Hills: Sage Publications
- Jackman, Simon. 2009. *Bayesian Analysis for the Social Sciences*. John Wiley and Sons.

c. Statistical inference and hypothesis testing

- Freedman, David, Robert Pisani, and Roger Purves. *Statistics*. W.W. Norton & Co., Fourth Edition. Chapters 16-18, 20-21, 23, 26-29.
- Gerber, Alan S. and Donald P. Green, *Field Experiments: Design, Analysis, and Interpretation*. Chapter 3.
- Dunning, Thad. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Chapters 5-6.

d. Matrix algebra

- Freedman, David. A. 2009. *Statistical Models: Theory and Practice*. Cambridge University Press. Chapter 3.
- Simon, Carl P. and Lawrence Blume. 1994. *Mathematics for Economists*. W.W. Norton & Co. Chapters 6-11.

II. Core Concepts in Causal Inference

a. Model specification

- Freedman, David. A. 2009. *Statistical Models: Theory and Practice*. Cambridge University Press. Chs. 6 (especially 6.4-6.5) and 10.
- Bartels, Larry. 1990. "Five Approaches to Model Specification". *The Political Methodologist* 3: (No. 2) 2-6.
- LaLonde, Robert J. 1986. "Evaluating the Econometric Evaluations of Training Programs with Experimental Data." *American Economic Review*, 76: 604-20.
- Leamer, EE. 1983, "Let's Take the Con out of Econometrics." *American Economic Review*, 73(1): 31-43.
- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*.

Cambridge University Press, Ch. 9. (See also Thad Dunning, 2008, "Model-Specification in Instrumental-Variables Regressions." *Political Analysis* 16(3): 290-302).

b. Potential Outcomes

- Gerber, Alan S. and Donald P. Green. 2012. *Field Experiments: Design, Analysis, and Interpretation*. W. W. Norton and Company. Chapter 2.
- Imbens, Guido W. and Donald B. Rubin. Forthcoming. *Causal Inference in Statistics and Social Sciences*. Chapter 1.
- Rubin, Donald B. 2005. "Causal Inference Using Potential Outcomes". *Journal of the American Statistical Association* 100.469: 322–331.
- Morgan, Stephen L. and Christopher Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. Cambridge University Press. Chapters 1 and 2.
- Gelman, Andrew and Jennifer Hill (2006). *Data Analysis Using Regression and Hierarchical/Multilevel Models*. New York: Cambridge University Press. Ch 9.2 3.
- Morgan, Stephen L. and Christopher Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. Cambridge, UK: Cambridge University Press. Chapters 1-2.

III. Research Design

a. Experiments vs. observational studies

- Gerber, Alan S. and Donald P. Green, *Field Experiments: Design, Analysis, and Interpretation*. Chapters 1 and 2.
- Freedman, David, Robert Pisani, and Roger Purves. *Statistics*. W.W. Norton & Co., Fourth Edition. Chapters 1-2.
- Angrist, Joshua D. and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press. Chapters 1-3.
- 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, eds., *Problems and Methods in the Study of Politics*. New York: Cambridge University Press, pp. 251-73.
- Deaton, Angus. 2009. "Instruments of Development: Randomization in the Tropics, and the Search for the Elusive Keys to Economic Development." The Keynes Lecture, British Academy, London.
- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Chapter 1, 10-11.

b. Experimental design and analysis

- Druckman, James N., Donald P. Green, James H. Kuklinski, and Arthur Lupia, eds. 2011. *Cambridge Handbook of Experimental Political Science*. Cambridge University Press.
- Gerber, Alan S. and Donald P. Green. 2012. *Field Experiments: Design, Analysis, and Interpretation*. W.W. Norton & Co.

c. Standard natural experiments

- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Chapter 2.
- Rosenzweig, Mark R. and Kenneth I. Wolpin. 2000. "Natural 'Natural Experiments' in Economics." *Journal of Economic Literature* 38 (4): 827-74.

d. Regression-discontinuity designs

- Arceneaux, Kevin, Alan S. Gerber, and Donald P. Green. 2006. "Comparing Experimental and Matching Methods using a Large-Scale Voter Mobilization Experiment." *Political Analysis* 14: 1-36.
- Imbens, Guido and Thomas Lemieux. 2008. "Regression Discontinuity Designs: A Guide to Practice." *Journal of Econometrics* 142:615-635.
- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge University Press. Chapter 3, Section 5.2, and Appendix 5.2.
- Angrist, Joshua and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press. Chapter 6.
- Green, Donald P., Terence Y. Leong, Holger L. Kern, Alan S. Gerber, and Christopher W. Larimer. 2009. Testing the Accuracy of Regression Discontinuity Analysis Using Experimental Benchmarks. *Political Analysis* 17(4): 400-417.
- Lee, David S. 2008. "Randomized Experiments from Non-random Selection in U.S. House Elections." *Journal of Econometrics* 142:675-697.
- Caughey, Devin and Jasjeet S. Sekhon (2011). "Elections and the Regression Discontinuity Design: Lessons from Close U.S. House Races, 1942–2008". *Political Analysis* 19 (4): 385–408.

e. Instrumental variables in the potential outcomes framework

- Angrist, Joshua, Guido Imbens, and Donald Rubin. 1996. "Identification of Causal Effects Using Instrumental Variables." *Journal of American Statistical Association* Vol. 91 No.434 (June): 444-455.
- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge University Press. Chapter 5.

f. Quasi-experiments

- Cook, T.D. and Campbell, D.T. 1979. *Quasi-Experimentation: Design & Analysis Issues for Field Settings*. Chicago: Rand McNally College Pub. Co.
- Donald T. Campbell and H. Laurence Ross. 1968. "The Connecticut Crackdown on Speeding: Time-Series Data in Quasi-Experimental Analysis." *Law & Society Review* 3(1): 33-54.

g. Multi-method research

- Freedman, David A.; David Collier, Jasjeet Sekhon, and Philip Stark, eds. *Statistical Models and Causal Inference: A Dialogue with the Social Sciences*. Cambridge University Press, Chapter 20.

- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Chapters 7 and 11.

h. Tests of design

- Imbens, Guido W. and Donald B. Rubin. Forthcoming. *Causal Inference in Statistics and Social Sciences*. Chapter 20.

- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge University Press. Chapter 8.

- Hartman, Erin, and F. Daniel Hidalgo (2011). "What's the Alternative?: An Equivalence Approach to Balance and Placebo Tests." Working paper, Department of Political Science, MIT.

- Rosenbaum, Paul R. 2010. *Design of Observational Studies*. Springer Series in Statistics. New York: Springer. Ch 5.2 (esp 5.2.4, though all of Chapter 5 is recommended)

- Paul R. Rosenbaum. 2002. *Observational Studies*. 2nd Edition. New York: Springer. Chapter 6.

- Sekhon, Jasjeet S. and Rocío Titiunik (2012). "When Natural Experiments Are Neither Natural Nor Experiments." *American Political Science Review* 106 (1): 35–57 (esp. analysis surrounding Table 1 and Table 2)

- John E. DiNardo and Jorn-Steffen Pischke (1997). "The Returns to Computer Use Revisited: Have Pencils Changed the Wage Structure Too?" *Quarterly Journal of Economics* 112.1, pp. 291–303

- Paul R. Rosenbaum (1989). "The Role of Known Effects in Observational Studies." *Biometrics* 45.2, pp. 557–569

IV. Regression Models

a. Mechanics of least squares and the classical linear model

- Freedman, David, Robert Pisani, and Roger Purves. *Statistics*. W.W. Norton & Co., Fourth Edition. Chapters 8-12.

- Freedman, David. 2009. *Statistical Models: Theory and Practice*. New York: Cambridge University Press. Chapters 2-5.

- Wooldridge, Jeffrey M. 2009. *Introductory Econometrics. A Modern Approach*. Chapters 2, 3 and appendix E.

- Greene, William. 2002. *Econometric Analysis*, 5th Edition. New York: Prentice-Hall. Chapter 6.

- Angrist, Joshua D., and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton: Princeton University Press. Chapter 3.

- Cameron, Colin A. and Trivedi, Pravin K. 2005. *Microeconometrics, Methods and Applications*. Cambridge University Press. Chapter 4.

b. Statistical inference and hypothesis testing with OLS

- Cameron, Colin A. and Trivedi, Pravin K. 2005. *Microeconometrics, Methods and Applications*. Cambridge University Press. Chapter 7.

- Greene, William. 2002. *Econometric Analysis*, 5th Edition. New York: Prentice-Hall. Chapter 7.

- c. OLS asymptotics
- Greene, William. 2002. *Econometric Analysis*, 5th Edition. New York: Prentice-Hall. Chapter 9.

d. Instrumental-variables least squares

- Angrist, Joshua and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press. Chapter 4.
- Morgan, Stephen L. and Christopher Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. Cambridge, UK: Cambridge University Press. Chapter 7.
- Wooldridge, Jeffrey. 2010. *Econometric Analysis of Cross-Section and Panel Data*. 2nd edition. Cambridge: MIT Press, pp. 621-636, Chapter 5.
- Sovey, Allison and Donald Green. 2011. "Instrumental Variables Estimation in Political Science: A Readers' Guide." *American Journal of Political Science* Vol. 55, No. 1. Pp. 188-200.
- Conley, Tim, Christian Hansen, and Peter E. Rossi. 2007. "Plausibly Exogenous." *Review of Economics and Statistics*, in print.
- Altonji, Joseph, Todd E. Elder, and Christopher Taber. 2005. "Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools." *Journal of Political Economics* Vol. 113:151-184.

e. Bootstrapping regression models

- Freedman, David A. 2009. *Statistical Models: Theory and Practice*. Cambridge University Press, 2nd edition. Chapter 8.

f. Graphical/path analysis

- Stephen L. Morgan and Christopher Winship (2007). *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. Cambridge University Press. Ch 3.
- Freedman, David A. 2009. *Statistical Models: Theory and Practice*. Cambridge University Press, 2nd edition. Ch 6.
- Freedman, David A.; David Collier, Jasjeet Sekhon, and Philip Stark, eds. *Statistical Models and Causal Inference: A Dialogue with the Social Sciences*. Cambridge University Press, Chapter 15.
- Pearl, Judea. 2000. *Causality: Models, Reasoning, and Inference*. Cambridge University Press.
- Hernan, Miguel A. and James M. Robins (2012). *Causal Inference*. Ch 6-9
- Glynn, Adam N. and Kevin M. Quinn. 2011. "Why process matters for causal inference". *Political Analysis* 19.3, pp. 273–286

g. Binary choice and interactions

- Wooldridge, Jeffrey M. 2009. *Introductory Econometrics. A Modern Approach*. Chapter 7.
- Chatterjee, Samprit and Alis S. Hadi. 2006. *Regression analysis by example*. John Wiley & Sons. Chapter 5.

- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14: 63-82.

h. Heteroskedasticity, measurement error, and other data problems

- Greene, William. 2002. *Econometric Analysis*, 5th Edition. New York: Prentice-Hall. Chapters 11-12.

- Freedman, David, Robert Pisani, and Roger Purves. *Statistics*. W.W. Norton & Co., Fourth Edition. Chapter 6.

- King, G. 1986. "How Not to Lie With Statistics: Avoiding Common Mistakes in Quantitative Political Science". *American Journal of Political Science*, 30(No.3) 666-687.

- Campbell, D.T. and D.W. Fiske. 1959. "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix". *Psychological Bulletin*, 56: 81-105.

- Long, J. Scott. 1983 *Covariance Structure Models: An Introduction to LISREL*. Beverly Hills, Calif.: Sage Publications

- 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* 102:215-232.

i. Time series

- Wooldridge, Jeffrey M. 2010. *Econometric analysis of cross section and panel data*. 2nd edition, Cambridge, MA: MIT Press

- Angrist, Joshua D., and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton: Princeton University Press. Chapter 5

- Hamilton, James D. 1994. *Time Series Analysis*. Princeton: Princeton University Press.

j. Panel data

- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd edition. Cambridge, MA: MIT Press. (Section 6.3.1, Chapter 10)

- Angrist, Joshua D. and Jorn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press. Chapter 5.

- Bertrand, Marianne, Esther Duflo and Sendhil Mullainathan. 2004. "How much should we trust differences-in-differences estimates?" *The Quarterly Journal of Economics* (February).

k. Limited Dependent Variables and Maximum Likelihood Estimation.

- King, Gary. 1998. *Unifying Political Methodology*. Ann Arbor: University of Michigan Press. Chapters 2-4.

- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*, Thousand Oaks, CA: Sage Publications. Chapters 1-2.

- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd edition. Cambridge, MA: MIT Press. Chapter 13.

l. Normal Regression in MLE and extensions (Probit, Heteroskedastic Regression, Ordered Probit, Censored Regression, Truncated Regression, Selection Models)

- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*, Thousand Oaks, CA: Sage Publications. Chapters 3-5.
- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd edition. Cambridge, MA: MIT Press. Chapters 15-17.

m. Probabilistic choice models (Logit, Multinomial Logit, Conditional Logit, Nested Logit, and Multinomial Probit)

- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*, Thousand Oaks, CA: Sage Publications. Chapter 6.

n. Event count models.

- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*, Thousand Oaks, CA: Sage Publications. Chapter 8.
- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd edition. Cambridge, MA: MIT Press. Chapter 19.

o. Duration models

- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd edition. Cambridge, MA: MIT Press. Chapter 20.
- The Oxford Handbook of Political Methodology covers other topics of interest, such as ecological inference, survival models, multilevel models, etc.

V. MATCHING

- Morgan, Stephen L. and Christopher Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. Cambridge, UK: Cambridge University Press. Chapters 4-5.
- Sekhon, Jasjeet S. 2009. "Opiates for the Matches: Matching Methods for Causal Inference." *Annual Review of Political Science* 12: 487-508.
- Sekhon, Jasjeet. 2008. The Neyman-Rubin Model of Causal Inference and Estimation via Matching Methods. *The Oxford Handbook of Political Methodology* (Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier, eds.) pp.271-299.
- Guido W. Imbens and Donald B. Rubin (Forthcoming). *Causal Inference in Statistics and Social Sciences*. Chapters 13-19.
- Wooldridge, Jeffrey. 2010. *Econometric Analysis of Cross-Section and Panel Data*. 2nd edition. Cambridge: MIT Press, pp. 614-621.
- Daniel E. Ho et al. (2007). "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference" *Political Analysis* 15(2):199–236.

VI. PERMUTATION TESTS/RANDOMIZATION INFERENCE

a. Basics of randomization inference

- Fisher, Ronald A. 1935. *The Design of Experiments*. Ch 1, 2
- Gerber, Alan S. and Donald P. Green (2012). *Field Experiments: Design, Analysis, and Interpretation*. W. W. Norton & Co., Ch 3.4 and 3.5.
- Edgington, Eugene S., and Patrick Onghena. 2007. *Randomization Tests*. Chapman & Hall, Fourth Edition, especially Chapter 3.
- Imbens, Guido W. and Donald B. Rubin. Forthcoming. *Causal Inference in Statistics and Social Sciences*. Ch 5
- Good, Phillip. 2005. *Permutation, Parametric and Bootstrap Tests of Hypotheses*. 3rd. New York: Springer
- Rosenbaum, Paul R. 2010. *Design of Observational Studies*. Springer Series in Statistics. New York: Springer. Ch 2
- Lehmann, Erich L. 2009. "Parametric versus Nonparametrics: Two Alternative Methodologies." *Journal of Nonparametric Statistics* 21.4, pp. 397–405
- Chang, Pao-Li and Myoung-Jae Lee (2011). "The WTO Trade Effect". *Journal of International Economics* 85.1, pp. 53–71

b. Test statistics and non-parametric combinations

- Imbens, Guido W. and Donald B. Rubin. Forthcoming. *Causal Inference in Statistics and Social Sciences*. Ch 6
- Pesarin, Fortunato, and Luigi Salmaso. 2010. *Permutation Tests for Complex Data: Theory, Applications, and Software*. Wiley Series in Probability and Statistics. John Wiley and Sons
- Pesarin, Fortunato and Luigi Salmaso. 2011. "A review and some new results on permutation testing for multivariate problems". In: *Statistics and Computing* 22.2, pp. 639–646

c. Confidence intervals

- Phillip Good. 2005. *Permutation, Parametric and Bootstrap Tests of Hypotheses*. 3rd. New York: Springer. Ch 3.3
- Rosenbaum, Paul R. 2010. *Design of Observational Studies*. Springer Series in Statistics. New York: Springer. Ch 2.6

VII. GRAPHICAL PRESENTATION

- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the most of statistical analyses: Improving interpretation and presentation". *American Journal of Political Science* 44.2, pp. 347–361
- Kastlelec, Jonathan P. and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science". *Perspectives on Politics* 5.4, pp. 755–771
- Gelman, Andrew and Jennifer Hill. 2006. *Data Analysis Using Regression and*

Hierarchical/Multilevel Models. New York: Cambridge University Press. Appendix B.
- Donahue, Rafe. 2011. "Fundamental Statistical Concepts in Presenting Data: Principles for Constructing Better Graphics."
- Tufte, Edward R. 2008. The Visual Display of Quantitative Information. Cheshire, Connecticut: Graphics Press p1-15, 123-137.

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