Political Science 7962:
Seminar in Research Design and Quantitative Techniques

In some types of graphical presentations of data (pie charts, histograms) surface area is equivalent to relative frequency. Understanding this concept will make the discussions of probability distributions easier to grasp. And probability distributions are

Social Statistics by Hubert M. Blalock is a comprehensive introduction to statistics which has been popular sine the s This text influenced the way generations of social scientists approached quantitative analysis The writing style is earnest and straightforward as befits a classic reference work. Do not expect cartoons and puns. Anyone planning to present themselves as a serious methodologist would do well to have a copy of Blalock on their shelf next to their copy of Gujarati s *Basic Econometrics.*

The Chicago Guide to Writing about Numbers

Reading Schedule
Complete indicated readings before class

Part I Conceptual Foundations and univariate descriptive statistics

Aug. 26: Introduction to the course, Vocabulary and Notation, Software, Datasets etc

Oct 28 Analyzing Variance (ANOVA)
Statistics II Chapters 9-11

Nov 4 Correlation and Bivariate Regression
Statistics II Chapter 4

Part IV. multivariate techniques

Nov 11 Multiple Regression, Dummies and Interactions
Statistics II Chapter 5
 Brambor, Clark, and Golder   Understanding Interaction Models: Improving Empirical Analyses   Political Analysis 14: 63-82 (moodle)
 Suits   Use of Dummy Variables in Regression Equations   Journal of the American Statistical Association 52: 280 548-551 (moodle)

Nov 18 Nonlinear regression and Categorical Dependent Variables : Logit
 Gill Essential Mathematics sections 1.5 to 1.7 (on moodle)
 Pollock 2012 The Essentials of Political Analysis 4th ed CQ Press Ch. 9 (on moodle)
 Statistics II Chapter 7
 Statistics II Chapter 8

Nov 25 Thanksgiving Break

Dec 2 Wrap up, Measurement Error and cautionary notes on inferences
 Abelson Ch   Styles of Rhetoric   moodle
 Abelson Ch   On Suspecting Fishiness   moodle
 Mock and Weisberg 1992. "Political Innumeracy: Encounters with Coincidence, Probability, and Chance" AJPS 36(4):1023-1046. (moodle)
 Franco, Malhotra, and Simonovits   Publication Bias in the Social Sciences: Unlocking the File Drawer   Science 19 Sep 2014: Vol. 345, Issue 6203, pp. 1502-1505 (moodle)
 Statistics Essentials Chapter 14
 Statistics II Chapter 21
The ASA's Statement on *p*-Values: Context, Process, and Purpose
Ronald L. Wasserstein and Nicole A. Lazar
The American Statistician Vol. 70 , Iss. 2,2016