Basics
(1) Statistics 103
(2) scott.schwartz@duke.edu
(3) http://www.stat.duke.edu/~sls37/
(4) 2:00 – 3:15 class (Social Sci 124)
(5) 3:30 – 4:30 lab (Old Chem 01)
(6) 7:30 – 8:30 office hours (Old Chem 211A)
(7) May 19 – June 28
(8) Except memorial day (May 31)
(9) and weekends (too bad, I know)

Course Outline
(1) Bring your own data
(2) Learn some statistics and programing (R)
(3) Analyze your data

A Little More
(1) 50% of grade is based on TWO tests
(2) 35% is based on final project/presentation
(3) 15% is based on homework/labs
(4) There is NO final

Supporting Text
(1) What I give you
(2) The web
(3) Wonnacott/Wonnacott Intro to Stat 5th Ed

Order of Things (W/W chapters)
Probability (3)
Models and statistics (4, 2, 5.1, 16.1)
Functions (2.5, 4.6, 4.7)
Bivariate data (5)
TEST
Random/Observational data (1)
Bias and Efficiency (7)
Central limit theorem (6)
Inference of sample means (8)
Hypothesis testing (9)
χ² tests (17)
TEST
Correlation (15.1–15.3)
Ordinary Least Squares (11)
Regression (12)
Multiple Regression (13, 15.4–15.5)
Regression Extensions (14, 10)
Maximum Likelihood estimation (18)
Bayesian Inference (19)

Final Project Presentations

One More Things
(1) You’re gonna work really hard
(2) It will be over before you know it
(3) You’ll end up with some practical skills
(4) Get help from your classmates