READ THIS FIRST

- If you have not used Jupyter before, it's very important that you read the introduction pdf. It will help you get started and give you tips for staying organized.
- If your class requires you to turn in PDF files (e.g. for Crowdmark), then you will need to run "Keep_output.jpynb" in Jupyter before you begin using R for your assignments. You'll need to "Stop" and re-start Jupyter. The section "One Last Thing" in the introduction pdf gives more details about this.

MODULES

The modules provide description of R code used to perform analyses covered in Stat 201. The modules include interactive examples using R code and real data. The following is an index of the modules with a brief description of each module's purpose. (The modules do not correspond one-to-one with the chapters in the 201 textbook. Some chapters may have more than one module and other chapters may have no modules.)

Module Index

Introduction: PDF instructions for getting you started with Jupyter

Module 1: Covers both entering data directly into R and importing a csv file into R.

Module 2: R functions for creating pie charts, bar charts, and histograms.

Module 3: R functions for mean, median, quartiles, IQR, standard deviation, the summary function,

and boxplots.

Module 4: Two-variable descriptive analysis, including scatterplots and correlation.

Module 5: Calculate probabilities for standard Normal and other Normal distributions. Find the

value on a normal distribution corresponding to a selected cumulative proportion (i.e.

probability).

Module 6: Fitting regression lines. Residual plots.

Module 7: Generating random numbers. Selecting a simple random sample.

Module 9: Binomial Probabilities and Normal approximation.

Module 10: Z-confidence interval, sample size calculation, and Z-test for population mean.

Module 11: T-confidence interval, T-test, matched pairs.

Module 12: Inference about two population means. T-test and confidence interval.

Module 13: Inference about a population proportion. Confidence interval, sample size calculation,

and hypothesis testing.

Module 14: Inference about two population proportions. Confidence interval and hypothesis testing

for the difference of two proportions.