Exam 01: Study Guide

The exam has two parts with equal weights, an open-notes take-home part and a closed-notes in-class part.

The take-home portion will consist of a small data collection exercise and data analysis where you apply one or more of the techniques that we have learned so far. You are welcome to use R (and I will even provide a short template to get you started), but you can also do the calculations by hand. The only part you hand in will be a paper with a short descriptions and your results. I will distribute the instructions at the end of class on Wednesday.

After some reflection, I have decided to change the format for the first exam. Rather than having you replicate the theoretical calculations we did in class, the questions here will focus on the application of those results to data. I will give you several different small datasets and/or summary statistics (such as \bar{X} or S_X^2) and will ask you to produce the correct point estimators, confidence intervals, or hypothesis tests for a given situation. Any critical values you need (i.e., t_{α}) will be provided. Bring a calculator. The exam should be easy as long as you are able to derive and/or memorize the table of common statistical tests.