## Exam 1 Chapters 1-5

This document may be amended up till the time of the exam.

Assignment 2 covers these chapters so completing the bulk of the problems before the exam will help. However, the biggest help will come from diligently following these points:

- 1. Bayes rule for Testing
- 2. The exam will have at least 1 example from Chapter 4 included verbatim.
- 3. The material to do with MGF's
  - a. How to derive a MGF
  - b. How to use the MGF to create the first two moments
  - c. How to manipulate moments to form  $\sigma^2$
  - d. Look at examples in class.
- 4. Z manipulation see CANVAS files
- 5. Chebyshev proof OR Expectation proof
- 6. Using R functions to calculate probabilities and densities.
  - a. P-stem()
  - b. D-stem()
  - c. Need to understand how calculation of probabilities differ when X is discrete or continuous.
  - d. End points etc
- 7. Properties of densities (ch 5)
- 8. Laboratories functions:
  - a. How they work
  - b. Can you comment on a function?
  - c. Skills developed will be examined.
  - d. Graphical skills (ggplot has been emphasized)