

# Statistics 3657a : Suggested Problems

## Chapters 3 and 4

November 13, 2009

Suggested problems up to the first term test

Section 3.8 : 1, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 23, 24, 25

The problems from 1 to 39 are all good, but the suggested problems are representative of the test type.

Suggested problems for the material concerning the second test:

The student is responsible for all the earlier material, but the test will concentrate on the material up to November 7, covering some material on expectations.

Section 3.8 : 42, 43, 44, 46 - 80.

Section 3.8 : These will include the general transformations, both discrete and continuous and order statistics.

42 (a), 43, 46, 49, 63 and 64 (do 64 first), 66, 69, 72, 73, 74, 78, 880

Hint for 80 : Consider a sample of size  $n+2$  from a Uniform(0,1) distribution. Find the pdf of  $(X_{(1)}, X_{(n+2)})$  Now use the fact that this pdf integrates 1.

Section 4.7 : 1-7,

8 (ask for a hint if you do not see this right away)

14-25, 29-35, 42-57, 59-60.