

**Last Homework Set:  
Math 338**

1. Week 1:

- (a) Mon, Nov 26: Finish up Maximum Likelihood Estimators (Section 10.8). The homework was: 10.2, 5, 7, 14, 50, 53, 59, 62

We should be able to start Chapter 11- much of it we have already begun discussing.

11.2: 11.1, 6\*, 20, 21, 29, 31

\* Addition to 11.6: Use the estimate found to find  $n$  to try to make the error between  $\bar{x}$  and  $\mu$  at 0.01 (your answer will be in terms of  $\sigma$ ), if  $\alpha = 0.05$ .

- (b) Tue, Nov 27: 11.3: 11.9\*\*, 10\*\*\*, 33, 35<sup>†</sup>

\*\*Hint for the second part of 11.9: What is the variance of  $\frac{(n-1)S_1^2}{\sigma^2}$ ?

How about  $\frac{(m-1)S_2^2}{\sigma^2}$ ? There is a typo in the back of the book- See if you can find what you think should be the correct answer.

\*\*\*You might look back to page 280 if you need a hint.

†: Repeat 11.35 using unpooled variance.

- (c) Thu, Nov 29: Review for Exam 3

- (d) Fri, Nov 30: Exam 3

2. Week 2:

- (a) Mon, Dec 3: 11.4-11.5: 12, 28, 29, 47, 49

- (b) Tue, Dec 4: 12.1-12.2: Intro to Hypothesis testing

HW: 12.3, 12.5\*, 12.9, 12.31, 12.37

There is a typo in 12.5:  $\theta_1 < \theta_0$ .

- (c) Thu, Dec 6: 13.1-13.3: Tests of Hypotheses

HW: 13.27, 29, 36, 37, 42, 45

- (d) Fri, Dec 7: Review for Final

The final exam is scheduled for Monday of finals week from 2-4PM.