# (possibly incomplete list of) **Topics Covered in Chapters 10 and 12** *Final Exam Time is 2:00pm on Wednesday, May 8th*

#### Format of Final Exam

Four longer questions, each worth twenty-five points. One each on multiple regression, ANOVA, logistic regression, and ANCOVA. As such, all of the topics from the first two tests are still possible. You are allowed to use a calculator and anything that you can write (by hand) on the formula sheet (one page, front and back).

### Leftover from Chapter 8 - ANOVA

What to do when there are no replications, and why this is necessary

## Chapter 12 – Logistic Regression

What the logistic regression is modeling (how to use the model equation) Why the standard regression methods (like least squares) and diagnostics are not appropriate for a binary dependent variable Likelihood ratio test (what it tests, not the equations behind it) Lemeshow and Hosmer test (what it tests, not the equations behind it) Testing that the model fits Testing that  $\beta_1=0$ 

**NOT:** multiple logistic regression or pages 643-690.

### Chapter 10 - ANCOVA

The ANCOVA model equation both with and without interaction How the interaction term relates to the slopes being the same How to test that the slopes are the same How to test the other assumptions Interpreting the ANCOVA output