The primary material on the first exam will be from Chapters 1 and 2, with some information on the first part of Chapter 3.

1) Perform all aspects of a one-way ANOVA from R output that will be provided. Aspects will include determining if group means are significantly different, identifying which group means are different, interpreting confidence intervals for differences in group means, constructing a means plot from results, and placing significance letters on a means plot. The results may be on a transformed scale. You should be able to interpret results from anova(), summary(), confint(), and fitPlot() on an lm() object and summary() and confint() on a glht() object. This would be similar to HW 2.6 and 2.7.

2) Analyze assumptions from R output that will be provided. You should be able to interpret results from leveneTest(), adTest(), and outlierTest(), along with residPlot() and hist(). The results may be provided with a screen capture of transChooser(). This would be similar to 2.5 and parts of 2.7.

3) Fill in an incomplete ANOVA table for a one-way ANOVA test and answer questions about the completed table. This would be similar to HW 2.1-2.3

4) Identify "effects" evident on paired interaction plots. This would be similar to HW 3.1.

4) Answer five short-answer questions. These will largely be around major concepts discussed in class and in the readings.

The exam is closed book and closed notes, you will not need to use R (but will need to be able to interpret results provided from R), you should bring a calculator and a pencil (exams written in pen will not be accepted), answers can be typed if you so choose (I will not accept exams that I cannot easily read) but I will be monitoring computer use during the exam, and you will have from noon-155 to complete the exam.

Please let me know if you have any questions. Thanks.