Homework for Lesson 11

Submit a Word document or pdf file to the ANGEL dropbox for this assignment.

A study is conducted to compare two teaching methods ( A and B) and five training times (1, 3, 5, 7, or 9 hours) in a crossed design. High school students are assigned completely at random to receive the one of the method x training treatment combinations. There were 3 students randomly assigned to each method x training combination, and at the end of the training session mastery scores were recorded.

The data are in the Week 11 Lessons folder as HW11\_Schools.xlsx.

1) Plot the data to show the response variable vs. hours training for each method (on one graph).

2) Run an ANOVA to compare the two methods at each level of training. Just show the output ANOVA table and appropriate mean comparisons.

3) Use ANCOVA to characterize the effect of increasing number of training hours on mastery scores for the two teaching methods. Fit the response as a polynomial (order 2) function of training hours. Show the output and indicate what factors are significant.

4) Write a 250 word summary of your results.