Let's now talk about the last lab.

In Lab 2 and 3, you used some basic statistics to analyze your sleep diary, and looked at relationships. Now, you have access to all the data from those who submitted sleep diaries.

(slide down to data) – The data is in the same format as before, so you need to preprocess it so that it reflects values you understand – midnight is zero, 11 pm is a minus one, and 1 am is a plus one, but you have some other variables that you will be using – section and gender.

I have provided some information about the class meeting times that you can use.

(slide down to instructions) – make a directory titled Lab5, get the data from BB, put it here, and create a lab5 script.

In the first part of your analysis, you'll be calculating medians by section on a variety of variables, wakeup time, bedtime, hours in bed and others. The first column will be YOUR data, the second column that of Section 0 – the instructors, Section 1 and so on.

You now get to explore the data – notice I don't tell you specifically what data sets to generate a scatter plot on? You will need to take means for each student on two variables, and generate a scatter plot, with a different color or mark for each section.

You will also need to calculate and output correlations for each section, and an overall correlation. Analyze it by writing a short paragraph – it should be in a separate document.

In Part IV, you will be generating an error bar line, plotting the average daily sleep hours by gender., and write a short paragraph, again, not in your script.

In Part V, the instructions are to create some groups to find differences in sleep patterns – One way to group is by section or class time. Once you generate groups, you will need to perform ttests to see if there are differences, and then write a paragraph discussing your results and offering conclusions.

After you generate these, publish the entire script to a pdf and check to make sure there are no errors.

Make sure your document is in your Lab5 directory, zip it up and submit it on Blackboard. Make sure to check that your zip file contains your published product, your Lab5 script, your data file and your Word document.