031:010 Research Methods in Psychology Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assignment #3 – Due four days after your Feb 27 – Mar 2 section meeting; submit your answers by saving this page as “*yourname*.docx” (instead of “assign3.docx”) and uploading it to your section instructor’s drop-box on ICON

*You may use any stats package you wish to do this assignment, but we suggest SPSS 19, which you can access on any University PC.*

The way to get the data files off the website is to right-click on the zip file and then choose “Save Link As …” and put it on your desk-top or H-drive to unzip later. After you have a copy of the zip file on your computer, double-click it to open it and move copies of the two data files inside to your desk-top or H-drive. Then start SPSS (from the Start menu) and choose “open existing data source” and find & select one of the two data files. (There are other ways to do all this, but this way is one that is known to work on all U-Iowa machines.)

1. The file data3b.sav contains the results from a between-subject experiment on lighting and memory. Conduct the appropriate t-test and report the standard results. (Reminder: we want a mean difference plus-or-minus the standard error of the difference, and a t-test with degrees of freedom and p-value.)

2. The file data3w.sav contains the results from a within-subject experiment on lighting and memory. Conduct the appropriate t-test and report the standard results.

Note: those were the exact same data, in terms of what the numbers were. And yet one of the analyses found a significant difference and the other did not. That, in a nutshell, is the difference in the power of the two design types.