**Psych 216 A Final Project**

The final project is to write a MATLAB tutorial or blog post on a topic in statistics, data analysis or modeling. We urge you to choose a topic that is relevant for your own research. The topic you choose should have some general applicability and should not just be analyzing your own data with the tools we have taught you. However you are welcome to use your own data as an example in the tutorial/blog or you can write a simulation based on fabricated data (as we have been doing in class). You should turn in your code as a single .m file and a folder of HTML files generated from you code using the matlab “publish” function. It is ok to work in groups of 2 or 3 but every member of the group must participate in the final presentation of the tutorial. If you have questions or need guidance email one of the instructors.

**Specific Guidelines:**
- Code must be clear and well commented
- There must be visualizations associated with the tutorial/blog that is generated from matlab code.
- 5 minute presentation in the last class where you walk everyone through your tutorial

**Suggestions:**
- For examples of good blog posts see Kendrick’s blog [http://randomanalyses.blogspot.com/](http://randomanalyses.blogspot.com/)
- Matlab tutorials can be based on the format of the class tutorials though they need not be as long. A good guideline is looking at a single cell of any tutorial. For example in the recent tutorial the section on correlated regressors would serve as a great final project.

**Examples (from students):**
- What is the effect of using log-transforms when analyzing reaction time data
- PCA on fMRI data
- Fitting Gaussian mixture models
- Power and false alarm rate for a parametric test compared to a non-parametric test