**AML 610 Fall 2014 Homework #1**

**Submit all files to** **smtowers@asu.edu****.**

**Due Tues Sep 2nd , 2014 at noon.**

**Please submit your files in a format hwk1\_<first name>\_<initial of last name>.bib .tex .pdf (etc)**

1. Using Google Scholar, search for two papers on a research topic that interests you. The papers must involve a compartmental mathematical model, and must also involve a comparison of the model to data.
2. Open a text file (not a Word file!) and create an annotated bibliography that contains the bibtex entry for each paper. As a latex comment above each of the entries, add the abstract, and also a short summary in your own words of the article.
3. Create a latex document that gives the titles of the two papers, and provides a short description of the studies presented in the papers*, and comments on the importance of the papers and the uniqueness of the analyses*. Cite the papers using bibtex.
4. Using DataThief, extract the data from one of the figures in one of the papers into a text file (or, alternatively, from a figure in any paper, even if it is unrelated to the research topic... the point of this exercise is to learn how to use DataThief). Read the file into R, or other data analysis program of your choice, and plot the data with appropriately labeled axes. Include this plot, with an appropriate caption, in your latex file.

Submit the pdf of the two papers, your bibtex file, the latex file, and the compiled PDF of the latex file.