Biostat 682, Final Project

Due: Monday, April 17, 2017 (in class)

This group project consists of the Bayesian Analysis of a data set of your choice. You should use the methods and models we learned in class to set up a prior, define the likelihood or sampling distribution, simulate from the posterior distribution of parameters given data, and assess the quality of your MCMC output. The analysis must be at least of a multiple regression problem, but can be more complicated. Below are specific guidelines that must be met. Failure to do so will result in a deduction of points.

1. A maximum of 6 pages of text, double spaced, 12 point font and 1.5 inch margins (all four sides). Single sided.

2. I want your paper to be broken up into 5 sections. 1) Introduction. 2) Model/Methods. 3) Data Analysis. 4) Discussion. 5) References. I do not want an abstract.

3. A page (maximum) of references. Include citations in the text and do not plagiarize. Plagiarism will result in a 0 on the assignment, at a minimum, and may result in more serious disciplinary action.

4. At most 4 figures and 2 tables. I do not want to see autocorrelation plots nor traceplots. Use other tools to convince me that your MCMC simulation has converged.

5. Figures and tables should NOT appear within the text. I want them at the end of the paper.

6. I want at least a modestly complicated model of the data. At a minimum, a multiple regression problem. If you are concerned

about whether or not your project meets these standards, please contact me with specifics about your project.

7. Do not attach or turn in any code.
8. Any deviations from the above will result in a deduction of points.