STAT581 Final Project Requirements

The final project is due by **Tuesday 5/12 by midnight**.

Students need to provide data for their project. **The analysis for the project needs to include at least one generalized linear model (logistic, Poisson, etc).** The write-up should be 6 pages (or less), written in the same style as a journal article, but with more detail and focus on the analysis.

Project Elements/Grading (20 pts total)

Introduction (4 pts)
>   Background
>   Identify research questions (1 or 2)
>   State response and predictor variables
>   Identify each variable as continuous or categorical (with levels)
>   Identify observational/experimental units and number of observations
>   Further details of design

Summary statistics and/or graphics (4 pts)
>   Typically done <u>before</u> formal model fitting

Analysis (6 pts)
>   Description/discussion of analysis with enough detail that someone else could recreate your results
>   You are encouraged to try different things, but focus on a single response variable
>   Justify any choices that you made as part of the analysis
>   Discuss model assumptions (may want to include diagnostic plots)

Results and Conclusions (4 pts)
>   ANOVA style likelihood ratio tests and/or table of estimated coefficients
>   Other results as appropriate (ex: pairwise comparisons for categorical predictor)
>   Interpretation and discussion (even if nothing is "significant"!)
>   Respond to your research questions

Overall Style (2 pts)
>   6 pages or less (including graphs but not R code or references)
>   Complete sentences and correct grammar
>   R code should NOT be included in main body of the report
>   While some tables and results can be taken directly from R output, the reader should not have to sift through superfluous output
>   Graphs should be clearly labeled

R code appendix
>   I will check congruency of R code vs written description
>   If R code is not included there will be a 2 pt deduction